

Infantry in Battle



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FOREWORD

SIXTY-FIVE years ago a French officer, Colonel Ardant du Picq, foreshadowed the need of a work of this kind. He wrote in *Battle Studies*:

"Deductions should be based upon study of modern combat, and that study cannot be made from the accounts of historians alone.

"The latter show the action of troop units only in a general way. Action in detail and the individual action of the soldier remain enveloped in a cloud of dust, in narratives as in reality. Yet these questions must be studied, for the conditions they reveal should be the basis of all fighting methods, past, present and future.

"Where can data on these questions be found?"

In the following pages is where data on these questions may be found. Data of this kind supplement the experiences of those who have been in battle and afford the only possible substitute for actual battle experience to those who have never smelled powder burned in action. This book epitomizes the battle action of the Infantry of the American Expeditionary Forces in France, of their allies and of their enemies as well.

This book is especially valuable to our infantry at this time, when modern tactical requirements place more and more emphasis on the skilled leadership of small units.

The National Guard has increased in military efficiency to such an extent that henceforth we must look for improvement by advancing the military culture of its leaders. If we can further that, we may look to the National Guard as well as to the Regular Army to develop new tactics to meet changing conditions. I know of no book that can improve the tactical understanding of our National Guard leaders more than this. The narratives are full of solid nourishment and fascinate the reader. They afford a counterpoise to the formalism of our elementary tactical instruction. To our younger officers who have not had war experience they supply the basis for making sound tactical decisions. The lessons set forth in this book properly studied form a most effective guarantee against tactical surprise during the early stages of a war. If it is widely and habitu-

ally used it will place the tactical instruction of the National Guard on a sound basis and enable our Army to develop a tactical doctrine for small units with its roots in reality and not in speculative theory.

This work is also of especial value to the Infantry of the Regular Army and the Organized Reserves. Its pages of actual experiences of other officers in battle, when studied with the idea in view of solving each situation for oneself, will constitute a working out of the applicatory system. Its benefit along this line cannot be overestimated.

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This volume was prepared by the Military History and Publications Section of The Infantry School. Major Edwin F. Harding planned the book and supervised in detail the preparation of the manuscript. Major Richard G. Tindall devised the sequence, performed most of the research, outlined the chapters and wrote most of them. Captain John A. Andrews and Lieutenant Charles T. Lanham assisted in the research and map preparation and contributed parts of certain chapters. Lieutenant Lanham edited the book in full. Colonel George C. Marshall directed the project.

EDW. CROFT,
Major General,
Chief of Infantry.

Washington
January, 1934.

CONTENTS

CHAPTER	PAGE
FOREWORD	v
INTRODUCTION	ix
I. OBSCURITY	1
II. SIMPLICITY	16
III. RULES	34
IV. SURPRISE	48
V. MOBILITY	61
VI. TERRAIN	73
VII. MIRACLES	83
VIII. DECISIONS	93
IX. OPTIMISM AND TENACITY	108
X. ORDERS	122
XI. COUNTERORDERS	137
XII. SUPERVISION	146
XIII. CONTROL	156
XIV. COMMAND AND COMMUNICATION	170
XV. ACTION AND MORALE	184
XVI. NEARING THE ENEMY	193
XVII. THE ADVANCE TO THE ATTACK	207
XVIII. BATTLE RECONNAISSANCE	218
XIX. TIME AND SPACE	237
XX. DIRECTION	250
XXI. THE PLAN	266
XXII. SCHEME OF MANEUVER AND MAIN EFFORT	278
XXIII. FIRE	290
XXIV. FIRE OF MACHINE GUNS	306
XXV. INFILTRATION	317
XXVI. INFANTRY-ARTILLERY TEAM	335
XXVII. NIGHT ATTACKS	359

INTRODUCTION

THIS volume treats of the tactics of small units as illustrated by examples drawn from the World War. It checks the ideas acquired from peace-time instruction against the actual experience of war. It emphasizes the practical as distinguished from the theoretical.

There is no lack of evidence to show that officers who have received the best peace-time training available find themselves surprised and confused by the difference between conditions as pictured in map problems and those confronted on the battlefield. This is largely because our peace-time training in tactics tends to become increasingly theoretical. In our instruction we generally assume trained organizations at full strength; our subordinates are competent, our supply arrangements function, our communications work, our orders are carried out. In war many or all of these conditions may be absent. The veteran knows that this is normal and his mental processes are not paralyzed when he finds himself in a situation where nothing is as he was taught to expect. He knows that he must carry on in spite of seemingly insurmountable difficulties and regardless of the fact that the tools with which he has to work are worn and broken. Moreover, he knows how to go about it. This volume is designed to give the peace-trained officer something of the viewpoint of the veteran.

By the use of numerous historical examples which tell of the absence of information, the lack of time, and the confusion of battle the reader is acquainted with the realities of war and the extremely difficult conditions under which tactical problems must be solved in the face of an enemy. In so far as there was material available, these examples pertain to American troops and have been drawn from the personal experience monographs on file at The Infantry School. The combat experience of other armies, however, has been utilized to supplement that of our own—especially when examples were needed to illustrate problems characteristic of warfare maneuver.

No attempt has been made to make this work a complete treatise

on minor tactics of infantry. The following chapters analyze and discuss a limited number of tactical principles and drive them home by historical examples illustrating their application in actual campaign. The idea has been to develop fully and emphasize a few important lessons which can be substantiated by concrete cases rather than to produce just another book of abstract theory.

GEORGE C. MARSHALL,
Colonel, Infantry.

INFANTRY IN BATTLE

CHAPTER I: OBSCURITY

In war obscurity is normal. Late, exaggerated or misleading information, surprise situations, and counter-orders are to be expected.

IN WARFARE of movement even higher commanders will seldom have a clear insight into the enemy situation. Detailed information of hostile dispositions and intentions will ordinarily be revealed only through the medium of combat. Obviously, information thus obtained is not available in the initial stages of a battle and experience has shown that little of it ever filters back to front-line leaders as the fight progresses. In mobile warfare, then, small units may expect to fight with practically no information of either friend or foe. Theirs, as Liddell Hart expresses it, is the problem of how to guard, move and hit in the dark.

In stabilized warfare more information is usually available, but even here the smaller units will be repeatedly confronted with obscure situations that demand immediate action.

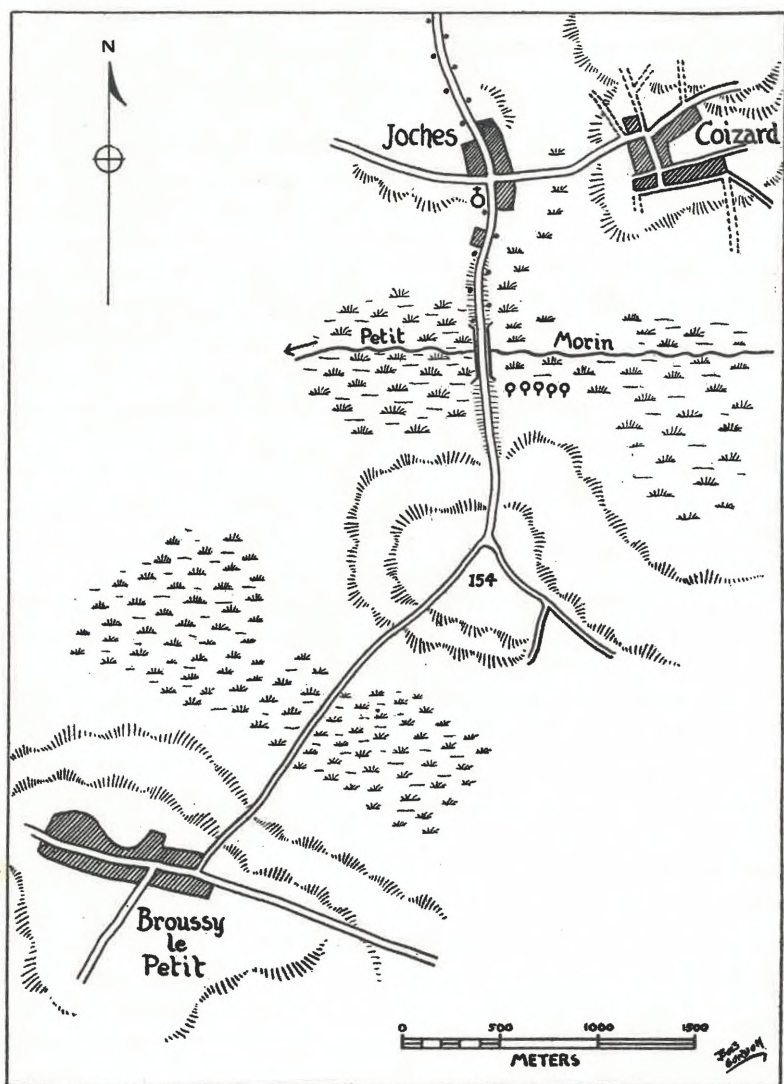
The leader must not permit himself to be paralyzed by this chronic obscurity. He must be prepared to take prompt and decisive action in spite of the scarcity or total absence of reliable information. He must learn that in war the abnormal is normal and that uncertainty is certain. In brief, his training in peace must be such as to render him psychologically fit to take the tremendous mental hurdles of war without losing his stride.

EXAMPLE I

On September 8, 1914, the German 14th Division, which had been in army reserve during the early stages of the Battle of the Marne, was given the mission of forcing a crossing of the wide swamp south of Joches.

The terrain was most unfavorable. The swamp, impassable even to foot troops, was bridged by a single road. The French, located south of the swamp, could fire with artillery and machine guns on both Joches and this road.

Marching from the north the 2d Company, 57th Infantry (tem-



Example 1

porarily attached to the 53d Infantry), reached the north edge of Coizard at 8:00 a.m., and prepared for action while its company commander went forward to the southern outskirts of the village

to reconnoiter. From there he could see Joches, the formidable swamp, and beyond the swamp Hill 154, interlaced by hedges and dotted with sheaves of grain. He could see that the French held this hill, for their red pantaloons were clearly visible in the morning sun. There was no firing; everything was quiet. Behind him he saw a few German batteries moving up. At 9:00 a.m. scouts left Joches and hastened forward to cross the swamp. The French immediately opened on the road and village with artillery, machine guns and rifles. At this point the company commander was called to the rear where he received the following battalion attack order:

"The 2d Battalion, 16th Infantry, starts the crossing of the Petit Morin River. The 53d Infantry will follow, with the 2d Company; 57th Infantry, at the head. The objective is the village of Broussy le Petit."

That was all.

The attacking infantry knew neither the enemy's strength nor the location of his front line. They did not know whether or not their attack would be supported by artillery. They did not know who was on their right and left. They only knew that they had to attack and would meet the French somewhere beyond the swamp.

From the personal experience monograph of Captain Adolph von Schell, German General Staff, who at the time these events occurred commanded the 2d Company, 57th German Infantry.

DISCUSSION

Here is an example of the appallingly small amount of information an infantry company can expect in an attack in open warfare. Leaders had to be guided by their mission, by the ground in front and by what they could see. In his monograph, Captain von Schell emphasizes the fact that the order quoted was the only one he received during the entire day.

The troops involved were excellently trained. In peace they had been accustomed to orders arranged in a certain set sequence and to more elaborate information. But when war came there was no information. To quote Captain von Schell:

"In open warfare on the Western Front and on the Eastern Front, in Rumania and in the Caucasus, it was always my experience that we had the most meager information of the enemy at the start of an attack."

EXAMPLE II-A

On July 14, 1918, the 30th U. S. Infantry was holding a defensive subsector south of the Marne. The regimental command post was located near the northern edge of the Bois d'Aigremont. The 1st Battalion, reinforced by an additional rifle company, Stokes mortars and machine guns, was assigned the defense of the area north of the Fossoy-Crezancy Road. Companies B and C, C on the right, were outposting the river bank from Mezy to the Ru Chailly Farm. The rest of the regiment was disposed in depth so as to make a strong defense of the Bois d'Aigremont. Two companies of the 38th Infantry were attached to the 30th.

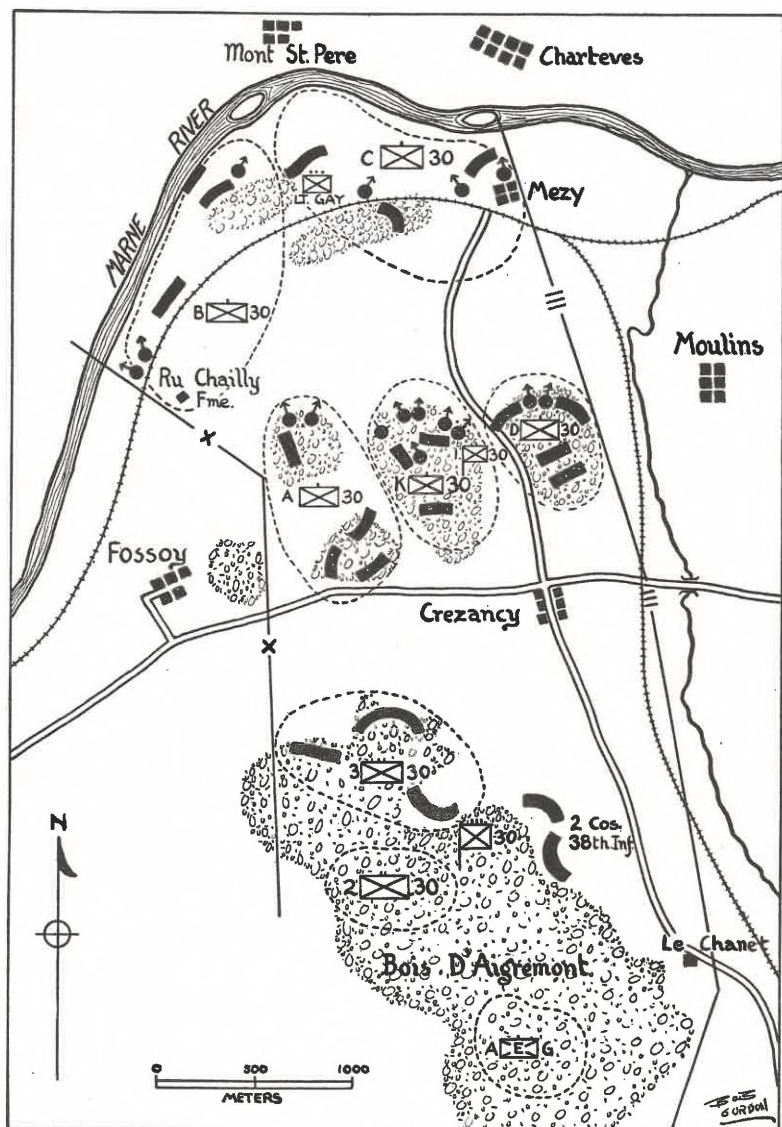
The following means of communication between the 1st Battalion and the regiment had been established: two independent telephone lines, one buzzer, one T.P.S. (earth telegraphy), a projector, pigeons and runners.

The regiment had expected a German attack from the north for many days. About midnight on the 14th American artillery opened a violent bombardment. A few minutes later German shells began to burst in the American area. The cannonade increased in violence.

Soon after the German bombardment had gotten under way, it was realized at headquarters of the 1st Battalion that the expected attack was in progress. Signal equipment was tested and found to be useless. A rocket was sent up calling for artillery fire on the north bank of the Marne. It was impossible to tell whether the American artillery was firing there or not, so from time to time other rockets were sent up. Runners were sent to Companies A, K, and D, informing them that the expected attack was in progress and directing them to hold their positions.

About 2:10 a.m. an excited runner from Company C arrived at the battalion command post. He reported that at the time he left Mezy the Germans in the town greatly outnumbered the Americans there. He also added that he had passed many of the enemy between Mezy and the battalion C.P. He appeared very calm after a time and was positive that the information he had given was correct.

A few minutes later another runner arrived, this time from Company B. He stated that the Germans had crossed the river opposite



Example II

the Ru Chailly Farm, had destroyed two platoons of Company B, and that his company commander requested reinforcements. The folly of attempting to move troops through the woods in darkness and under intense artillery fire was realized and accordingly no movement to reinforce Company B was ordered. A messenger from Company A now reported that all the officers in his company had been killed. Runners sent out from the battalion C.P. for information never returned.

At daylight four officers' patrols were sent out. One of these, commanded by a battalion intelligence officer, returned shortly and reported that a hostile skirmish line was only 50 yards in front of the woods.

In view of these alarming reports the battalion commander decided to move his C.P. about 500 yards to the rear in a ravine west of Crezancy. He believed that this location would facilitate control, give a better line on the action, and be more accessible to runners. Messengers were sent to Companies A, K and D, informing them of the change. The D Company commander construed this message to mean that the battalion was withdrawing. Accordingly he withdrew his company to the Bois d' Aigremont via Crezancy. The battalion commander was unaware of this movement at the time.

At this point a message was received from the regimental commander asking for a report on the situation. From the context it was clear that he had not received any of the messages that had been sent back during the previous five hours.

From the personal experience monograph of Major Fred L. Walker, Infantry, who at the time these events occurred commanded the 1st Battalion, 30th Infantry.

DISCUSSION

In the first few hours of battle the battalion commander knew neither the location of his own front line nor that of the enemy. In fact he did not even know if his two forward companies were still in existence. He was unaware of the situation of the units on his flanks—if they were holding or if they had been withdrawn. He had to judge the situation by surmise and part of that surmise was incorrect.

EXAMPLE II-B

Let us now consider the situation at regimental headquarters in the same action. Hour after hour passed and no word was received from front, flanks, or rear; only reports from nearby units in the Bois d'Aigremont that they were suffering heavy casualties. All means of communication within the regiment had failed soon after the bombardment began. Messages were sent to the rear reporting the situation. Runners sent forward did not return.

Throughout the night the regimental commander and his staff sat about a table in the C.P. dugout, studying a map by the uncertain light of one dim candle. This candle was periodically extinguished by the concussion of bursting shells. The roar of artillery made conversation difficult.

At daylight the regimental commander made a personal reconnaissance. Shells were falling everywhere within the area between the Fossoy-Crezancy road and the Bois d'Aigremont, but other than this he saw no signs of activity.

A message now arrived from the front line indicating that the Germans had crossed the Marne at two or three places. Apparently it had taken hours to get word back. At 5:00 a.m. the following message was received by runner from the 1st Battalion:

"From: Portland (1st Bn., 30th Inf.) July 15, 2:30 a.m.

To: Syracuse (30th Inf.)

We have had some gas. All groups south of railroad, on line with P.C. are being heavily shelled. Heavy machine gun fire in vicinity of Mont St. Pere since 2 a.m. Have received no news from front-line companies. I believe all lines are out. Bombardment began at 12:00.

Signature.

P. S. Captain McAllister reports that he needs reinforcements and that his two-front line platoons have been driven back. Cannot depend on any method of liaison. Better base your actions from your P. C."

In five hours the regimental commander had learned practically nothing of the situation. The American artillery kept pressing him for targets but he could designate none. He knew neither the location of his own troops nor the location of the enemy.

More messages were sent out in an endeavor to determine the

situation. Shortly afterward an officer reported that one of his men had talked with a man from Company C who said that some of his company had been driven out of Mezy. Just after this an officer reported from 1st Battalion Headquarters. He stated that the battalion commander had been unable to get any direct news from his forward company commanders since 2:30 a.m.; that the woods just north of the Fossoy-Crezancy road had been torn to pieces by shell fire, and that casualties in the headquarters personnel were heavy. Companies A, K and D had not been engaged. The battalion commander was certain, from what some stragglers had said, that the Germans had crossed the river near Mezy and the Ru Chailly Farm, had passed the railroad and were moving south.

Some time after this the commander of the 1st Battalion reported in person to the regimental command post. He reported that his two forward companies, B and C, were totally lost; that every unit of his command had sustained heavy losses; that communication, even with companies nearby, was extremely difficult, and that he had moved his command post slightly to the rear. He then recommended that the artillery, which had prepared defensive concentrations within the position, place fire south of the railroad. He added that he thought what was left of Companies A, K and D could still hold for a while.

A little later an officer came in with a message in his hand saying: "A message from brigade". The colonel reached for it, expecting that here, at last, was some definite news which had been obtained by aviators—the location of the hostile front line, the enemy's assembly areas, the location of the German boats and bridges. The message read as follows:

"From: Maine (6th Brigade) July 14, 11:30 p.m.

To: Syracuse (30th Inf.)

Test message. Please check the time this message is received and return by bearer.

Signature."

This message received at 6:35 a.m., was the first word from higher headquarters since the start of the battle at midnight.

From the book, *The Key Point of the Marne*, by Colonel Edmund L. Butts, who at the time commanded the 30th Infantry.

DISCUSSION

Here is an instance where the regimental commander knew even less of the situation than the commander of his front-line battalion. Not until the battalion commander went in person to the regimental command post did the colonel have even a glimmering of the situation, and then much vital information was lacking and much was in error. For example, the regimental commander was informed that the two front-line companies were "totally lost." Actually, as we shall see, this was completely erroneous. Some elements of these companies were still very positively in the war. In fact, at about the same time the colonel was receiving this disheartening report, two platoons of one of his front-line companies, aided by machine guns, were breaking a German attack by the effective expedient of practically annihilating the battalion making it.

The incident of the message from brigade to regiment, received at the height of battle, and seven hours en route, is most instructive.

EXAMPLE II-C

Lieutenant James H. Gay commanded a platoon of Company C, 30th Infantry, posted near the river bank opposite Mont St. Pere. His command had not suffered a great deal from the German bombardment but communication had been cut with all units except one platoon located about 300 yards to his rear. "At dawn," states Lieutenant Gay, "I knew absolutely nothing of what it was all about or what was happening except in my own little sector."

About 4:30 a.m. some Germans approached from the front and after a fight lasting several hours were repulsed by Lieutenant Gay's platoon. Around 9:00 a.m. a lull ensued. Communications were still out. Lieutenant Gay's idea of the situation is given in his own words:

"I thought the whole action had been merely a good sized raid which had been repulsed. There was absolutely no further movement in our range of vision and I did not know of the events which were occurring elsewhere at the time."

Soon afterward Lieutenant Gay saw Germans to his right rear and to his left rear. At this point American artillery fire came

down on his unit. He decided to move back and join the platoon in his rear. When this was accomplished the two platoon leaders met and discussed the situation, finally agreeing to move their combined units toward the Company C.P.

En route they stumbled into two parties of Germans and took 150 prisoners. Having so many prisoners and finding that the company command post was occupied by the enemy, they decided to move on to the battalion C.P. On the way they passed another command post; it was deserted. They reached the old location of the battalion C.P. only to find it had been moved, but where—no one knew.

Lieutenant Gay then marched the two platoons and the 150 prisoners directly down the road through Crezancy to the south. Although the column must have been extremely visible, not a shot was fired at it. He finally reached American troops, turned over his prisoners and later rejoined his battalion.

Statement of Lieutenant James H. Gay, who at the time these events occurred commanded the 2d Platoon, Company C, 20th Infantry.

DISCUSSION

The little knowledge of the situation which can be expected by leaders of small units is well exemplified by the belief of Lieutenant Gay, who, in the midst of one of the decisive battles of the World War, thought that the Germans must have made a good-sized raid.

In this action we have seen the meager information possessed by a regimental commander, by the commander of a forward battalion, and by the leader of a front-line platoon. What information they did receive arrived hours after the events had occurred, was indefinite and often negative. A comparison of this with the extremely definite information usually provided in map problems is striking. For officers to expect anything approaching such precision in actual combat is a sure road to surprise and disappointment.

Owing to the extreme violence of the German bombardment, communication in this battle was undoubtedly more difficult than usual. But on the other hand, this was a defensive action for the Americans, they were operating over familiar terrain, and their communication agencies were installed at the start of the fight.

EXAMPLE III

On July 17, 1918, the 2d Battalion, 104th Infantry, which was then holding a position in Belleau Wood, received an order stating that it would be relieved that night. Later a message came in directing the battalion scout officer to report to regimental headquarters. Following this another message arrived ordering the company commander of Company E to report to the brigade. Neither of these officers returned. Preparations for the relief went on, but as hour after hour passed and no reconnaissance parties arrived, the battalion commander became concerned. At midnight he called the regimental command post but could locate no one except the supply officer, of whom he enquired:

"What about this Field Order number so and so (the order for the relief)? There haven't been any friendly visitors up here."

The reply killed any idea of an early relief.

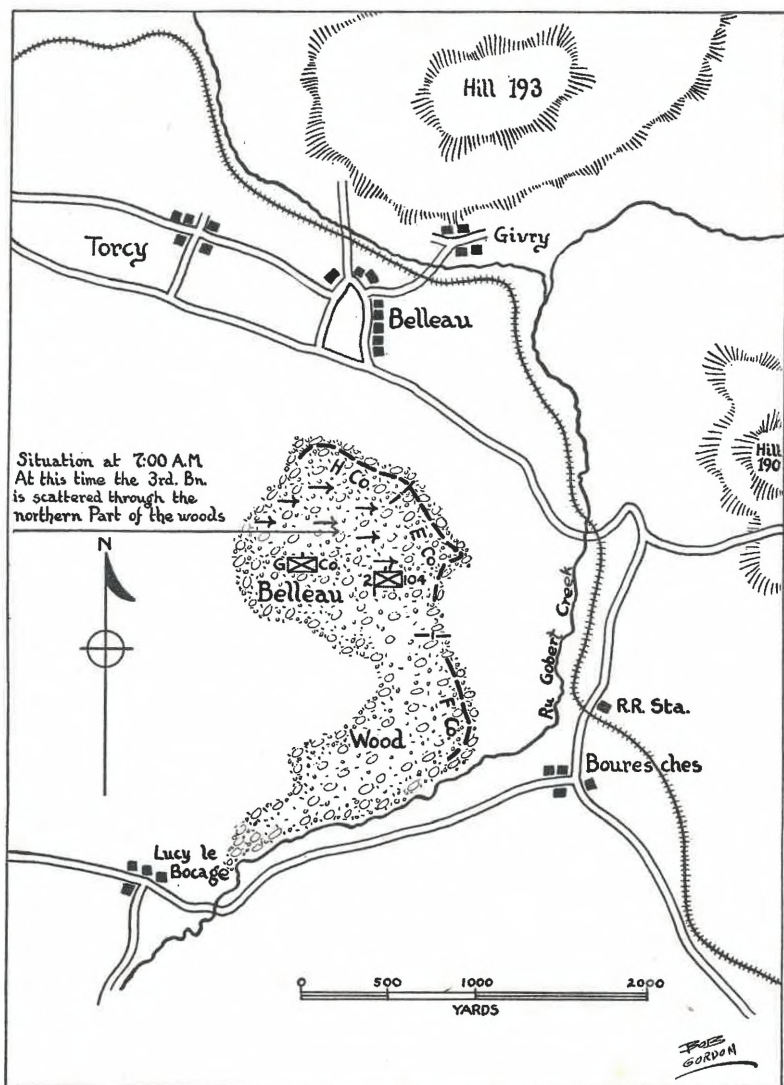
"Well, there isn't anybody around here, but I can safely tell you that it is all off."

At 3:30 a.m. on the 18th the missing scout officer returned with the information that the 3d Battalion would pass through the 2d and attack at 4:35 a.m.

Time passed. No one appeared. At 4:15 a.m. the 3d Battalion commander arrived alone with his hands full of charts and orders. He was visibly agitated. After complaining about "a horrible tie-up on the part of the higher-ups" he briefly explained the contemplated plan. This attack, which was to be launched from the north edge of the wood and drive toward the little town of Belleau, was believed to be merely a local operation for the purpose of rectifying the lines.

At 4:35 a.m. the barrage placed on the hostile lines began to roll forward. Only now did elements of the 3d Battalion's assault companies begin to arrive. Troops on the left could be seen advancing but the adjacent battalion on the right was not moving forward. A heavy enemy artillery concentration began to fall on Belleau Wood.

The 3d Battalion commander, seeing that his troops had arrived late and were somewhat disorganized by hostile artillery fire, now declared his attack off, and directed his officers to have the men



Example III

take what cover they could find in the woods. He then sent the following message by pigeon to Brigade Headquarters:

"Pigeon message: Time 6:05 o'clock. Location: at woods where 3d Bn. was to start from.

"Did not reach starting-off place until attack had started. Machine-gun Company did not arrive until 5:10. Their ammunition did not arrive. Infantry companies all late on account of lateness of arrival of ammunition and other supplies. When they arrived it was broad daylight and fully exposed and companies being shelled by the enemy. Battalion now scattered about woods, taking whatever cover they can find, as woods are being heavily shelled by high explosive. Can get in touch with me through P.C. 2nd Battalion."

Meanwhile the 2d Battalion commander had started for his C.P. En route he saw scattered men of the 3d Battalion frantically digging. When he reached his C.P. he was told that the regimental commander wished to speak to him. He heard the colonel's voice:

"That 3d Battalion has not attacked."

"I know it."

"Well, you take command of it and attack at once."

"It can't be done," the stupified major replied. "They are scattered all over the woods."

"Well, it has to be done. This order comes from higher authority. However, I'll give you a little time. What time is it by your watch?"

"7:05 a.m."

"All right, I'll give you until 7:30 and a rolling barrage. Go to it."

Then the wire went out and ended the conversation.

The commander of the 2d Battalion took charge. At 8:20 a.m. he managed to launch the attack that should have started at 4:35 a.m. Although the 7:30 barrage had passed, the attack at 8:20 a.m., in which he employed some elements of his own battalion, was reasonably successful.

From the personal experience monograph of Major E. E. Lewis, Infantry, who at the time these events occurred, commanded the 2d Battalion, 104th Infantry.

DISCUSSION

Here we see two battalion commanders participating in the Aisne-Marne Offensive, the attack in which the initiative on the

Western Front finally and definitely passed to the Allies. Both officers believed it to be a local action to rectify the line!

We see the commander of the 2d Battalion suddenly confronted with a surprise situation—an order to take command of another battalion, whose men were scattered, whose units were disorganized, and to attack with it in 25 minutes. This officer had not been thinking about the problem of the 3d Battalion. He knew neither the location of its units nor the whereabouts of its officers, and yet immediate action was mandatory.

Hundreds of examples can be given; those cited are not isolated cases. Consider the experiences of the French Third and Fourth Armies and the German Fourth Army. On August 22, 1914, these huge forces clashed in a series of true meeting engagements. The French army commanders, in particular, did not believe that the enemy in force was anywhere near.

On the morning of the 22d a battalion of the French 8th Division (part of the 3d Army), detailed as the support of the advance guard, *was destroyed within its own outpost lines, without higher authority knowing anything about it at the time.* Even today it is difficult to say what actually happened. Apparently it was surprised in route column by Germans who had penetrated the French outpost in the early morning fog.

On the same day, a few miles to the west, the French Fifth Colonial Brigade, marching north, stumbled into the flank of the German XVIII Reserve Corps which was marching west. The battle started with the French advance guard striking the German column at right angles and shooting up the combat trains of part of one division.

Near St. Vincent, on this same eventful day, the commanders of the II French Colonial Corps informed one of his division commanders, "There is nothing in front of you. You can push right on. It's just a march today." Soon afterward he and his staff became the private and personal target of German light artillery and scrambled to cover. When asked for information he replied, "I haven't the faintest idea of the situation."

In the battle of Guise, on August 29, 1914, initial contact on the front of the German Guard Corps seems to have been made by the Corps Signal Battalion which, through error, marched into the enemy lines.

Indeed, there appears to be no limit, save the imagination, to the astounding situations that evolve in the darkness and confusion of war. Consider the Turkish pursuit of the British in 1915, after the battle of Ctesiphon. The Turkish cavalry was sending in reports of the location and movements of the retreating British. The Turkish infantry was pressing forward to gain contact with the British. According to the British official history the Turkish cavalry was actually in rear of the Turkish infantry without the infantry, cavalry, or high commanders being aware of the fact. The movements attributed to the British were presumably the Turkish cavalry's observation of its own infantry.

CONCLUSION

Again it is stressed that these examples afford a striking contrast to the detailed and precise information that we are given in map problems. In actual combat practically nothing is known. The situation, particularly in open warfare, is almost invariably shrouded in obscurity. Advanced units, at best, will have but little accurate knowledge of the enemy and frequently none of their own troops. Moreover, even the meager information they do possess will often be false or misleading.

But this does not mean that leaders must meekly submit to the proposition that war is likely to be a game of Blind Man's Bluff and that nothing they can do will alter this condition. On the contrary, this realization of the dearth of reliable information in war should serve a dual purpose. First, it should stimulate the initiation of the positive and energetic measures that are necessary if vital information is to be gained. Secondly, it should so prepare the leader mentally that, instead of letting himself sink into the fog of apathy when no information is forthcoming, he will recognize the condition as normal and rise to prompt and decisive action.

We carry out in war what we learn in peace. In consonance with this principle, the military student, after becoming familiar with the basic tactical concepts, should be given but little positive information of the enemy in his various terrain exercises, map problems and map maneuvers. Thus will he become conversant in peace with one of the most trying and difficult problems in war.

CHAPTER II: SIMPLICITY

Simple and direct plans and methods are alone practicable in war—FSR, 1923.

WHETHER we like it or not, combat means confusion, intermingled units, loss of direction, late orders, misleading information, unforeseen contingencies of all sorts. Troops must carry out their orders under conditions of fatigue, hunger, unfavorable weather conditions and the devastating psychological and physical effect of the fire of modern weapons. Not to take into account these grim realities in formulating a plan of action is fatal. To attempt elaborate and complicated maneuvers, requiring perfect coördination between many leaders and many units, is to invite disintegration and defeat.

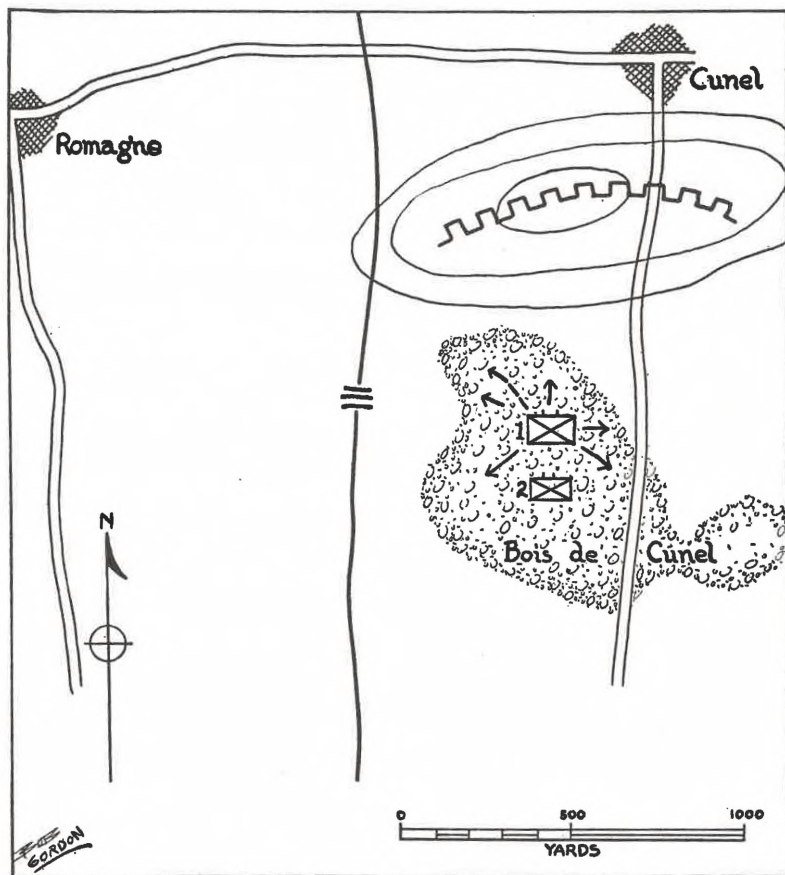
EXAMPLE I

On the morning of October 10, 1918, during the Meuse-Argonne Offensive, the 30th U. S. Infantry was ordered to attack to the north toward the little town of Cunel. Following an artillery preparation, the 1st Battalion was directed to launch its attack from the north edge of the Bois de Cunel. Of the two remaining battalions of the 30th, the 2d was in support while the 3d was held in Brigade Reserve.

The attack jumped off at 7:00 a.m. The 1st Battalion reached a point about 500 yards north of the wood where it was stopped by heavy fire from the front and both flanks. The men sought holes in the ground for cover. The hostile fire was so terrific and covered the area so thoroughly that any movement, either to the front or rear, appeared suicidal. This battalion therefore remained where it was until dark. The 2d Battalion had not left the woods.

Meanwhile an order was received from the Division Commander directing that the trenches in the 30th Infantry zone, north of the Bois de Cunel, be taken at once. To carry out this mission the following plan was adopted:

The 1st Battalion, under cover of darkness, would withdraw to the Bois de Cunel where it would reorganize and at 7:30 p.m.,



Example 1

after an artillery preparation had been placed on the German trench to the north, it would again attack, closely following a barrage. The 2d Battalion would follow the 1st in support.

At dark the 1st Battalion fell back to the wood and began to reorganize for the new attack. This proved extremely difficult. In the darkness the withdrawing units lost direction and became intermingled. No vestige of control remained. To crown the difficulty of reorganization, hostile artillery fire in the Bois de Cunel was terrific. H hour approached. The American preliminary bom-

bardment began. The battalion commander was still struggling to gather the remenants of his command and to bring at least some semblance of order out of the confusion that existed.

H hour arrived and passed but the battalion was still so disorganized that no troops moved forward at the designated time.

At 10:00 p.m. the 2d Battalion, which had not been committed during the day and which was completely in hand, made a surprise attack and captured the German position.

From the personal experience monograph of Captain Turner M. Chambliss, Infantry.

DISCUSSION

The plan of attack for the 7:30 p.m. operation can be explained simply and briefly. But although the words are few, simple, and readily understood, the operation that they dictated was far removed from simplicity.

A battalion pinned down under hostile fire all day was required to withdraw under fire, re-organize in a wood in the darkness, and then resume the attack.

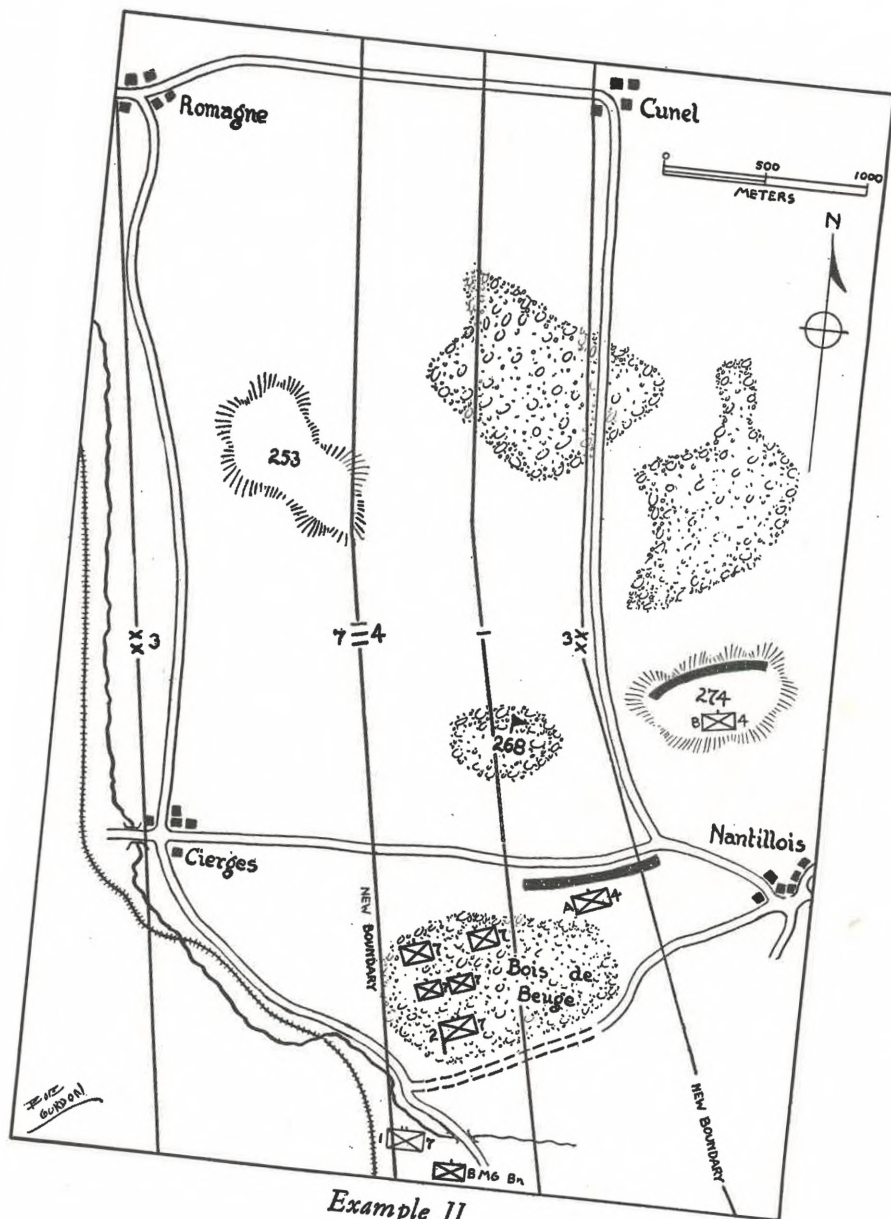
The withdrawal was difficult and had to be made by individual movement. Movement in the dark for 500 yards, across a shell-pitted, fire-swept zone, is not a simple operation for a battalion, which at the start is deployed in lines of skirmishers; neither is a night reorganization in a wood that is being shelled by the enemy.

The simple solution would have been to attack with the 2d battalion as the assault battalion at 7:30 p.m.

EXAMPLE II

On October 3, 1918, the 5th U. S. Brigade, with the 4th Infantry on the right and the 7th on the left, occupied the zone of the 3d Division. Each regiment was disposed in column of battalions. In the 4th Infantry the 1st Battalion held the front line with Company B on Hill 274 and with Company A along the Cierges-Nantillois Road, its right resting at the road junction west of Nantillois. It had patrols in wood 268. The remaining companies of the battalion were located in rear of A and B.

In the 7th Infantry, the 2d Battalion occupied the northern part of the Bois de Beuge with two companies in the front line and two



in support. These companies were all partially deployed. The 1st Battalion, 7th Infantry, with an attached company of the 8th Machine Gun Battalion, was located south of the Bois de Beuge near a stream and a narrow gauge railroad. This unit was well in hand and more compactly grouped than the 1st Battalion. The brigade had occupied approximately these same positions since the afternoon of September 30th. It had been expecting to attack to the north.

Orders were finally received directing that the attack be launched at 5:25 a.m., October 4th. By this order the boundaries of the 3d Division were moved a few hundred yards to the west and the direction in which they ran was slightly altered. The new right boundary of the division and of the 4th Infantry was the Nantillois-Cunel Road while the new left boundary for the division and the 7th Infantry was to the west of the Cierges-Romagne Road. The boundary between regiments approximately halved the zone. Therefore, in order that the troops might face their objectives at the start of the attack, both the 4th and 7th Infantry had to move to the west.

At 6:00 p.m., October 3d, the regimental commander, 7th Infantry, issued an oral attack order at his C.P. located south of the Bois de Beuge near the narrow gauge railroad. It was nearly dark at the time. This order directed the 2d Battalion, which was then in the front line in the Bois de Beuge, to sideslip to the left and be prepared to lead the attack the following morning. The 1st Battalion, 7th Infantry, was similarly directed to move to the left and, in the morning attack, to follow the 2d Battalion in support at 500 yards.

Although the 1st Battalion commander suggested that it would be simpler for his unit to be employed in assault, since its movement into the new zone would be easier, the order was not changed. This battalion completed its movement successfully. A road, a stream and a narrow gauge railroad all provided guiding features leading from the vicinity of its former position to the new location.

Arriving at its new position, the 1st Battalion was unable to locate the 2d. When the hour for the attack came the 1st Battalion moved forward with two companies leading and two following. Near Cierges a portion of the 8th Machine-Gun Battalion

was encountered. Its commander requested information as to the location of the 2d Battalion. About this time Company G of the missing battalion was seen moving forward. The company commander, however, had not been in touch with the remainder of the battalion for a long time and had no idea where it was. He attached himself to the 1st Battalion.

The 1st Battalion commander now reported to the regiment that he was unable to locate the 2d Battalion; that in pushing forward in the regimental zone his unit had come under fire and that, therefore, he was advancing it to the attack as assault battalion. This attack moved forward from the line of departure later than had been intended and, as a result, met with little success.

The 2d Battalion, in attempting to sideslip to the left during the night, had become so badly scattered that, as a unit, it was rendered ineffective on October 4th.

Let us now turn to the 4th Infantry. In this regiment the assault battalion, the 1st, was similarly ordered to sideslip to the left in the dark. It successfully accomplished this movement.

Part of the battalion order, issued at 11:00 p.m., October 3d, which referred to the movement of Company B, then on Hill 274, was in substance as follows:

"Company B will be relieved by units of the 80th Division. It will not wait for them but will withdraw at once and move into Company A's present position."

The company commander returned to his unit and issued his order about 1:00 a.m. The 1st and 2d platoons were in the front line and the 3d and 4th were in support. The company commander ordered the two front-line platoons to withdraw due south until they reached the southern slope of Hill 274 and there assemble in column of twos. He ordered the 4th platoon (on the left) to move to the Nantillois-Cunel Road (near its location at the time), form in column of twos and then move south until it reached the Nantillois-Cierges Road, when it would wait for the company commander. He ordered the 3d platoon to move to the left and follow the 4th in column of twos. The 2d and 1st platoons, in order were directed to follow the 3d. All platoon leaders were cautioned to have their men observe the utmost secrecy.

After all platoons had started, the company commander went to the head of the column. When the road junction was reached he

directed the 4th and 3d platoons to march to the west along the Nantillois-Cierges Road. When the last man had cleared the road junction these two platoons were halted, deployed in squad columns and marched to the south for 300 yards. Here they were again halted and faced to the front. The assault platoons, the 1st and 2d, similarly marched along this road, halted, and deployed in rear of it. Thus, by utilization of distant terrain features and by care in making the movement, this company was enabled to deploy in the dark, in its proper zone, after a flank movement along the line of departure.

About 4:00 a.m. it reported that it was in position. Company A, the other assault company of the battalion, also made the sideslip successfully.

However, after Company B left Hill 274 the Germans moved forward and occupied it, thereby enfilading the attack with machine-gun fire. Little success was obtained.

From the personal experience monograph of Captain Fred During, Infantry, who at the time, commanded Company B, 4th Infantry, and from a statement of Captain George S. Beatty, Infantry, who at the time, was adjutant of the 1st Battalion, 7th Infantry.

DISCUSSION

It is not a simple movement for battalions to sideslip in the dark into positions with which they are not familiar and then to attack at daylight. Much of the failure of the 3d Division attack on October 4th can be attributed to this attempt to sideslip the two assault battalions.

In the 7th Infantry, the 2d Battalion became scattered and lost and the support battalion suddenly found itself in the front line. It would have been far simpler to move the 1st Battalion to the left front and use it in assault. It was better grouped initially; it did not have to make such an extreme movement to the flank; and finally there were distinct, unmistakable terrain features, that could be easily followed, even in darkness, to the new location.

Although the assault battalion of the 4th Infantry, by meticulous attention to the mechanics of the flank movement, successfully completed it, the evil features inherent in it made themselves evident. Obviously the execution of such a complicated maneuver required a considerable amount of time and therefore it could not

be postponed too long. Very possibly this was the reason Company B was directed to move at once, without waiting for the arrival of the troops who were to relieve them. As a result, the Germans occupied Hill 274 and enfilade fire from this commanding ground played a major part in breaking the attack on the morning of the 4th.

Attempts to execute complicated maneuvers in combat have both direct and indirect evils. They almost never succeed.

EXAMPLE III

On June 29, 1918, Company D, 26th Infantry, carried out a raid on German positions near Cantigny. The hour set for the action was 3:15 a.m. at which time there was just enough light to see.

The order for this raid was, in part, as follows:

Headquarters, 1st Battalion,
26th Infantry.

FIELD ORDERS
No. 10

France, June 24, 1918.

INFORMATION

The enemy is occupying the woods to our front with one battalion, something in the manner indicated on the attached sketch.

INTENTION

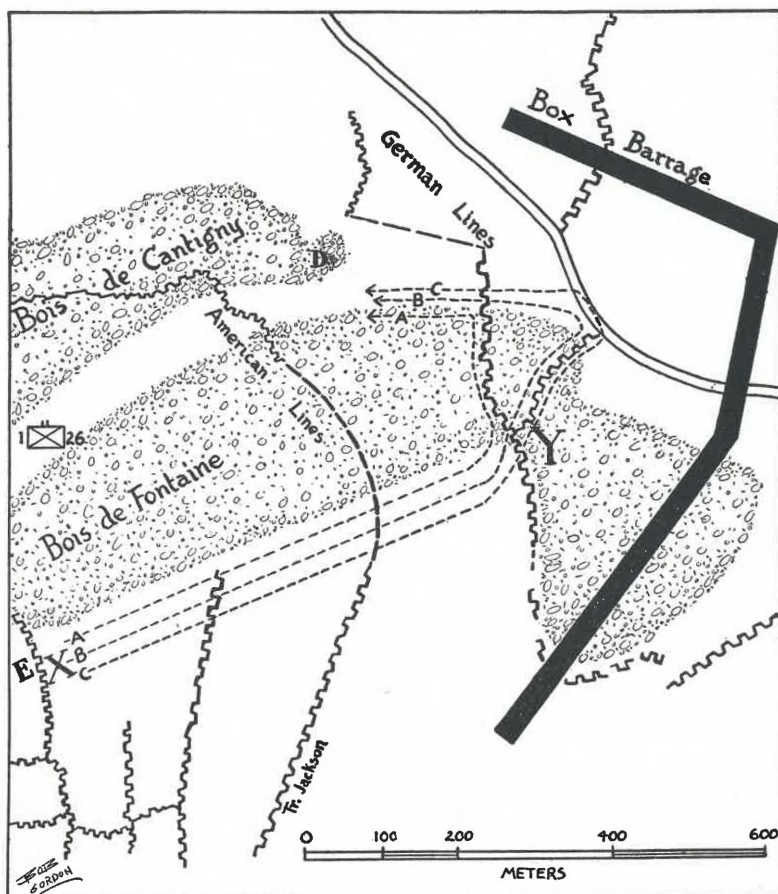
On J Day at H Hour, we will raid the Wood, entering the woods at the angle, 22.8-30.4 (point Y on sketch), and kill or capture the occupants of the trenches running north and northeast as far as the northern edge of the woods, returning from there by the northern edge of the BOIS FONTAINE.

ALLOTMENT OF UNITS

The raiding party will be composed of personnel of Company D, 1st Lieutenant Wesley Freml, Jr., officer commanding raid.

- (1) Lieut. Dillon —1 Sgt—2 Cpls—12 Pvts—A Party.
- (2) Lieut. Dabney —1 Sgt—2 Cpls—12 Pvts—B Party.
- (3) Lieut. Ridgley —1 Sgt—2 Cpls—12 Pvts—C Party.
- (4) Lieut. Tillman —1 Sgt—2 Cpls—12 Pvts—D Party.
- (5) Lieut. Freml (O.C.)

—2 Sgts—3 Cpls—18 Pvts—E Party.
(2 stretchers and 4 stretcher bearers.)



Example III

FORMATION

A, B, and C Parties will form left to right on taped ground at point marked X (see sketch) at H—30 minutes. They will each be in column of files. E Party will follow in rear in same formation. D Party will, at the same time, be disposed in observation on the extreme eastern tip of the BOIS DE CANTIGNY.

* * * * *

SPECIAL SIGNALS

When he has assured himself that the party has withdrawn to within our own lines, the officer commanding the raid will fire three (3) star RED rockets—this will signify to all concerned that the raid is completed.

TASK

On commencing artillery bombardment, A, B, C and E Parties, preserving their general alignment, will advance as close as possible to the woods.

A, B and C Parties, in the order named from left to right, will advance directly into the woods. If opposition is encountered, B Party will hold with covering fire from the front, and A and C Parties will advance by the flanks, outflanking the resistance.

On entering the woods, A Party will split off to the left branch of the trench to the north edge of the wood, capturing or killing all occupants and from that point it will return.

B and C Parties will continue down trench running to the northeast, outflanking tactics being employed when necessary. On reaching north edge of the woods, they will function the same as A Party.

E Party will follow in rear. It shall be its particular function to guard the right flank and reinforce the assaulting parties when necessary.

D Party will remain in observation in its original position, ready to engage with fire any machine guns that may open from the slope of the ridge or northeast of the woods. It will retire on completion of the raid.

* * * * *

THEODORE ROOSEVELT, JR.,
Major (USR) 26th Infantry,
Commanding.

Information and instructions as to fire support, dress and equipment and many other details were included. The fire support by artillery, machine guns, and howitzer weapons in general was as follows:

The assault parties were directed to move forward during a ten-minute preparation by artillery and Stokes mortars. A box bar-

rage would then be formed, while the infantry rushed the position. The plan called only for those supporting fires normally available in the sector. The position and routes followed by the assault parties are indicated on the sketch.

The raid was carried out as planned. Thirty-three prisoners were taken, including one officer, five noncommissioned officers, two artillery observers and two or three machine gunners. Several sacks of papers and other intelligence data were secured. The American casualties were one officer and one soldier killed and four soldiers wounded.

From records of 1st division.

DISCUSSION

We have previously examined a plan that was briefly and simply stated but that nevertheless was the antithesis of simplicity when it came to execution. Here we have a plan that appears complicated. It requires some time and thought to understand, and yet simplicity is its underlying feature. It is obvious, then, that simplicity in tactics is not necessarily equivalent to simplicity in words.

Let us examine this plan a bit more closely. In the first place, the order was published several days before the raid, thereby giving all concerned ample time to digest it and to make the necessary preparations.

The work planned for the artillery, machine guns and Stokes mortars was simple. They were directed to do some shooting on a time schedule. That was all.

It is with the assault parties, however, that we are chiefly concerned. Note that the southern edge of the Bois de Fontaine parallels the route of advance of these parties. To maintain direction to their objective, each group had only to follow this edge of the wood. Arriving at the hostile position the left party turned to the left (north) following the German front line trench until it reached the north edge of the Bois de Fontaine which it then followed back to the American lines. The two right groups moved along the trench that runs to the northeast until they, too, reached the north edge of this wood which they similarly followed back to their own position. All three parties had clear-cut features to guide them and each route formed a circuit.

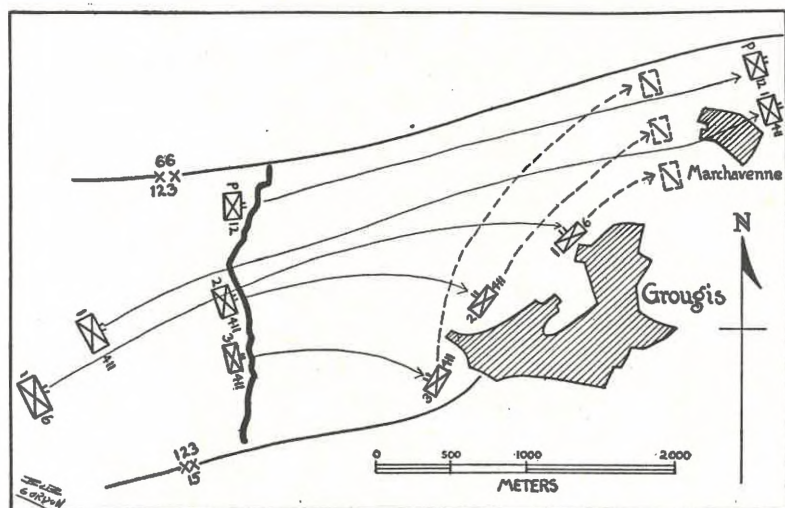
Thus we see that the tasks for the individual groups were not difficult to carry out on the ground. The chances for possible mishaps were greatly reduced by the care taken in selecting these guiding features for the parties to follow. Their mission was clear and simple. The action of Party A did not hinge on that of Party B. The plan did not depend on any delicate calculation of time and space. It was simple and it proved effective.

EXAMPLE IV

On October 17, 1918, the French 123d Division attacked north-eastward toward Grougis and Marchavenne. The scheme of maneuver follows:

Three battalions were employed initially in assault. On the left, a provisional battalion of the 12th Infantry (2d and 3d Battalions combined because of losses) had the mission of maintaining contact with the 66th Division to the north. This was considered particularly important. The 2d and 3d Battalions of the 41st Infantry, with a company of tanks attached, were on the right of this provisional battalion. These two battalions were ordered to move forward and establish themselves facing Grougis.

The 1st Battalion of the 41st in second line was directed to fol-



Example IV

low behind the interval between the 12th Infantry unit and the 2d battalion 411th Infantry and then, after the two right assault battalions had established themselves facing Grougis, push ahead and take Marchavenne. The 1st Battalion 6th Infantry was ordered to follow the 1st Battalion 411th Infantry at first and protect its right flank, finally taking position on the left of the 2d Battalion 411th Infantry, facing the northwest portion of Grougis.

The 2d and 3d Battalions of the 411th Infantry and the 1st Battalion of the 6th Infantry, having established themselves as a flank guard to the south, were to push forward to Marchavenne when successively liberated by the advance of the 15th Division on the south. Thereafter they would assist the attack of the 66th Division on the north.

The remainder of the 123d Division's infantry, which was holding the line of departure, was ordered to reform and become the division reserve. Artillery fires were to lift on a carefully arranged time schedule. Marchavenne was to be taken in one hour and thirty minutes after the jump-off by a battalion which, at the start of the attack, was some 4,500 yards away.

Marchavenne was captured, practically on time, by an attack from the *south and southeast—carried out by the provisional battalion of the 12th Infantry which was to guard the north flank of the division*. This battalion lost contact with the 66th Division and got ahead of the troops on the right. Its two assault companies crossed each other's path and the bulk of the battalion, advancing rapidly, crossed diagonally the entire divisional zone. It found cover just north of Grougis (which was still held by the enemy) and took Marchavenne by an envelopment from the south and east about 7:45 a.m.

The battalion that had been ordered to take the town was still more than a mile to the rear, slowly advancing. It arrived at Marchavenne long after the town had fallen, but in time to help hold it against a counter attack. These two battalions in Marchavenne held an isolated position for several hours.

The assault battalions of the 411th Infantry and the 1st Battalion of the 6th Infantry met with some success but after reaching Grougis they were unable to progress farther. At 5:00 p.m. they were still there, facing southeast. On this day, after the initial

capture of Marchavenne, which could not be exploited, the division had no success. During the early part of the attack the provisional battalion of the 12th Infantry captured ten cannon and 300 prisoners.

From the article by Major P. Janet, French Army in the *Revue D'Infanterie*, December, 1926, on the advance of the 123d French Division from the Hindenburg position to the Sambre Canal.

DISCUSSION

Here is a complex plan of attack devised by officers of long experience in war and which was to be carried out by veterans. The original assault battalions were to fan out and form flank protection while a second line battalion, advancing through the interval, was to take the objective. The flank battalions would then disengage successively, move on to the objective, and take part in a renewal of the advance beyond Marchavenne. Furthermore, the artillery support was arranged according to a carefully worked out time schedule; it would be upset unless this delicate time table worked with mathematical precision.

True, the 123d Division achieved a modicum of success in this attack, but it certainly cannot be attributed to the plan. Nothing happened as expected. The assault battalions of the 411th Infantry managed to make some advance, as did the 1st Battalion of the 6th Infantry, but all three became involved near Grougis and were there the entire day. These were the troops that, according to the plan, were to carry the attack beyond Marchavenne.

The complicated maneuver of attacking to the front, then facing to the right, then disengaging, then pushing forward again, was too much, even for these veteran troops. It could not be carried out at all, let alone according to the carefully prepared time table.

It is interesting to note that the battalion which had been directed merely to maintain contact on the north flank, crossed to the south boundary of the division and took the objective by an envelopment from the south and east. It was to the aggressiveness of this battalion that the division owed such success as was achieved. It appears that the failure or inability to exploit the rapid capture of Marchavenne was due principally to the complicated and involved plan of attack.

EXAMPLE V

On the morning of November 23, 1914, a German force, located south and east of Lodz in Poland, finding itself surrounded by Russians, turned about and struck to the north in an effort to break through the enemy and escape. The Germans who had been fighting for days were at the point of exhaustion. Fresh Russian columns were converging on them from all sides. The situation was desperate.

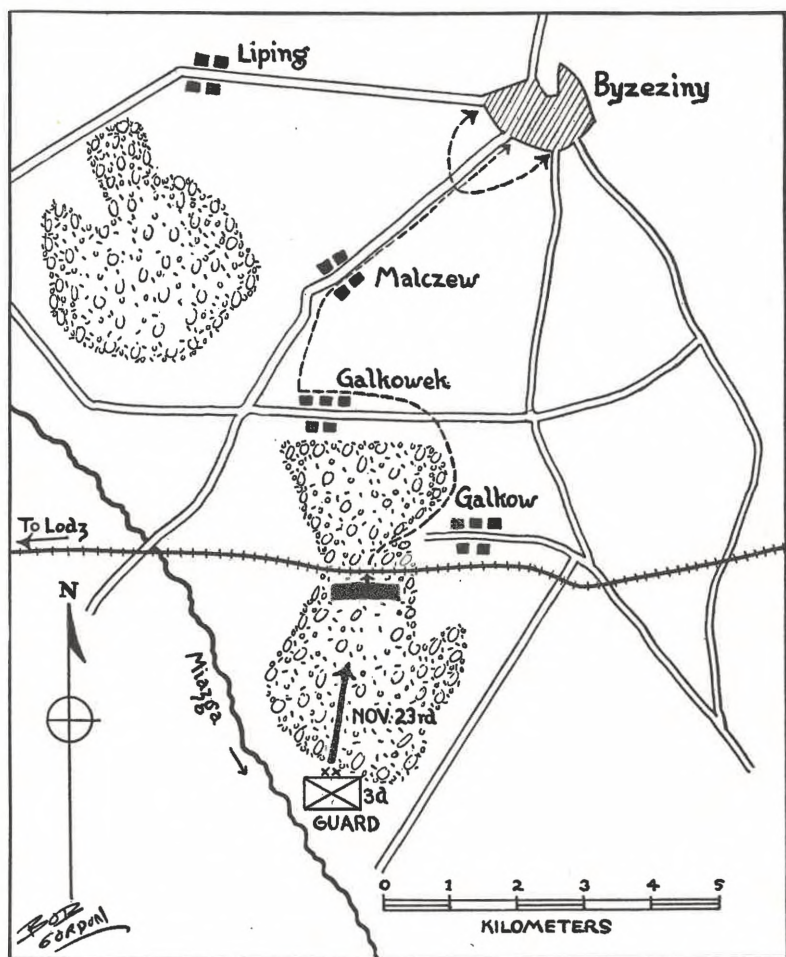
The 3d Guards Division, part of the beleaguered German force, spent the 23d attacking northward toward the little town of Byzeziny, which it had passed through shortly before in its advance to the south. All day the Guards drove forward through a dense wood, against strong opposition. Russians appeared to be everywhere—on both flanks and in rear.

At 4:00 p.m. the Guards reached a railroad that ran through the wood southwest of Galkow. Here the troops were halted and reorganized. At dusk the situation, as known to the 65-year-old division commander, General Litzmann, who was with the advanced elements, was as follows:

The location of other German units was unknown. Earlier in the day firing had been heard to the east but this had now abated. The artillery of the Guard Division was south of the wood guarded by some infantry. Along the railroad, with the division commander, were some 1,500 men, all that were left of seven battalions of infantry. All units were terribly depleted and hopelessly intermingled. The men were so exhausted that they could scarcely be kept awake. Late in the afternoon the hostile resistance to the front had weakened. Such was the situation as known to this remnant of a division as darkness and the bitter cold of a Polish winter night closed in on November 23d.

Soon after dark a corps order arrived. In a stable filled with Russian wounded, the division commander pulled a small candle out of his pocket, lighted it, and examined the order. It had been delayed in reaching the Guards. The instructions it bore pertained only to operations for the 23d, but it did make clear the fact the corps commander wanted them to reach Byzeziny on that day.

Therefore, at 7:25 p.m. the division commander rapidly outlined the following plan:



Example V

"This division captures Byzeziny tonight. It will advance in column, with advance guard via Galkowek and Malczew, in silence, and gain the road extending from the southwest toward Byzeziny. It will develop when one kilometer in front of the town and press into it by a surprise attack.

"After the storming of Byzeziny, baggage will be brought forward. Messengers will report to receive orders at the market place

in the building where Division Headquarters was located before."

The advance guard and order of march were designated and a supplementary order was sent to the artillery.

The division commander marched with the advance guard. The maneuver was successful. Byzeziny was stormed and the staff of the VI Siberian Corps captured. The success of this action materially aided the remainder of the German forces in smashing through the hostile lines. The Russians becoming discouraged, withdrew, while the German units, taking along thousands of prisoners and much material, rejoined their main army.

From the German official account.

DISCUSSION

The Guards were in a situation as difficult and desperate as can be imagined. They had no information of the location of other German troops and no knowledge of the hostile dispositions, except that the enemy seemed to be everywhere in superior numbers. Their men were exhausted and their units depleted and intermingled. They were in a dense forest; it was bitterly cold, and night was falling.

Under such conditions a master effort could be made only by superior troops, commanded by determined leaders, working under a simple plan. The division commander took these considerations into account. His plan was based on the three essentials for a night operation: direction, control and surprise.

Troops became easily lost in a night march, particularly exhausted troops who are staggering forward in a daze. Things must be made as simple as possible for them. Accordingly the route that was prescribed facilitated the maintenance of direction. First, movement along the eastern edge of the wood to the north edge. From here Galkowek could be reached with little danger of the column getting lost. From Galkowek the march could continue straight to the north and be certain of intercepting the road which led directly to Byzeziny.

To insure the utmost control the division commander ordered that the advance be made in route column. It was no time for half measures. The men were completely exhausted, so much so that unless they were directly under the eyes of their leaders, they would

lie down and go to sleep. An attempt to move in several columns or in any extended formation would have meant disintegration and certain failure.

To achieve the third essential, surprise, the order directed that the advance be made in secrecy and silence.

Finally, as a crowning bit of psychological bravado, came the order for establishing the command post in the market place of Byzeziny. A large dose of optimism was required by officers and men, and their commander with the deft touch of the true leader gave it to them. German accounts describe the thrill that ran through the assembled German officers on hearing the resolute words of their leader.

Here one of the most complex, difficult, and desperate situations which troops have ever been called upon to face was met and solved by a simple order. In such a dilemma only the utmost simplicity of plan and execution stood any chance of success.

CONCLUSION

In war the simplest way is usually the best way. Direct, simple plans, clear, concise orders, formations that facilitate control, and routes that are unmistakably defined will smooth the way for subordinate elements, minimize the confusion of combat, and definitely increase the chances of success.

In brief, simplicity is the sword with which the capable leader may cut the Gordian knot of many a baffling situation.

CHAPTER III: RULES

Combat situations cannot be solved by rule or by applying the memorized solution of other tactical problems.

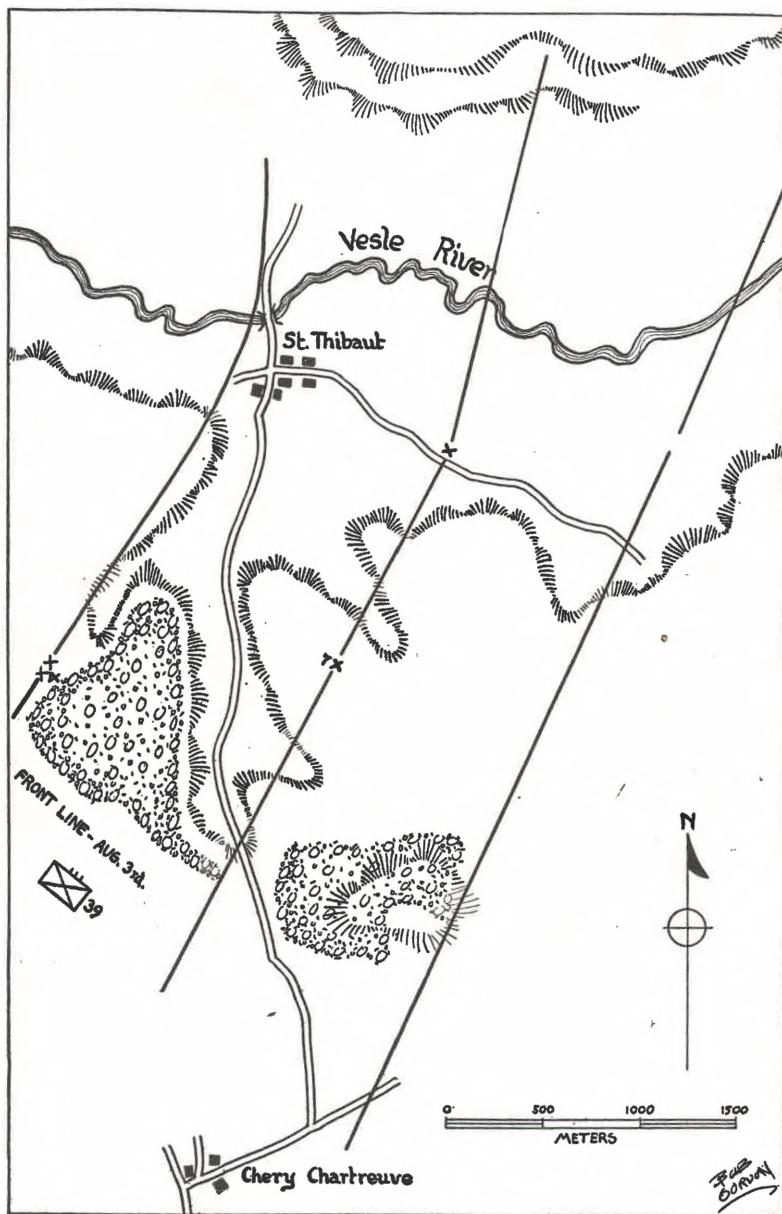
THE infinitely varied circumstances and conditions of combat never produce exactly the same situation twice. Mission, terrain, weather, dispositions, armament, morale, supply, and comparative strength are variables whose mutations always combine to form a new tactical pattern. Thus, in battle, each situation is unique and must be solved on its own merits.

Victories are not won by the application of formulae. The art of war is based on a few broad underlying principles and has no traffic with rules. The leader who would master this difficult art must learn to apply these principles. He must be able to cut to the heart of a situation, recognize its decisive elements, select the principle or principles involved and base his course of action on these. Often one principle will seem to violate another. The difficult thing is to determine which shall predominate.

In war there is many a broad road to ruin but there is no royal road to success. A competent tactician cannot be made overnight—it is a process of years. Training in solving problems of all types, long practice in making clear, unequivocal decisions, the habit of concentrating on the question at hand and an elasticity of mind are indispensable requisites for the successful practice of the art of war. The leader who frantically strives to remember what some one else did in some slightly similar situation is headed for defeat.

EXAMPLE I

In the early days of August, 1918, the Germans were retiring toward the Vesle River. On the third day of this month the 4th U. S. Division relieved the 42d and advanced. The 39th Infantry, part of this advancing division, moved forward in an approach-march formation with two battalions in assault. All day the troops struggled forward—the slowness of the advance being caused not



Example 1

by hostile resistance but by the difficulty of the terrain—particularly the dense woods that had to be negotiated.

Late in the day resistance was encountered and overcome. The enemy fell back. Orders were now received to form a column with an advance guard, take up the pursuit and drive across the Vesle in order to establish a bridgehead on the slopes to the north.

The 39th Infantry (less one battalion) was designated as the advance guard of the 7th Brigade. After a march of several hours hostile artillery fire was encountered, whereupon the column halted for the remainder of the night. At dawn the march was resumed, but finding that the proposed route of advance was being shelled by the enemy, the advance guard countermarched to another road. Some confusion resulted from this, the 2d and 3d Battalions becoming intermingled. Thus when the movement again got under way Company H formed the advance party, Companies F, K and L the support, and Companies I, M, Machine Gun, E and G, in the order named, the reserve.

Early on August 4 the column approached the Vesle on the Chery Chartreuve—St. Thibaut Road. About 2,000 meters south of St. Thibaut this road passes through a deep defile, 200 meters wide and nearly perpendicular to the commanding heights north of the Vesle. The road runs through the full 1,000 meter length of this defile, then emerges at the northern exit to open terrain, over which it winds smoothly to the little village of St. Thibaut. To reach this village the open terrain before it, which lies under direct command of the high ground to the north, has to be crossed.

No enemy infantry had been encountered. Company H approached St. Thibaut in column of twos without being fired on. At 8:00 a.m. it entered the town. By this time part of the support, marching in column of squads, was well out of the defile. Company H had cleared the town and had nearly reached the bridge over the Vesle when suddenly the Germans on the northern heights opened with machine guns and artillery on the advance party and the support, causing heavy casualties and throwing the support, in particular, into the greatest confusion.

From the personal experience monograph of Major S. S. Eddy, Infantry, who at the time commanded the Machine Gun Company, 39th Infantry.

DISCUSSION

Here the employment of stereotyped methods resulted in the violation of the Principle of Security.

Until the advance guard emerged from the defile, 1,000 meters south of St. Thibaut, the terrain had shielded it from hostile ground observation. As it left this friendly protection it came in direct view of the commanding heights to the north. Hostile artillery had been firing from these heights but a short time before, and yet the advance party moved out in column of twos and the support in column of squads. In Major Eddy's words, "It was a sight that must have made the German artillery observers gasp in amazement for before them lay an artilleryman's dream."

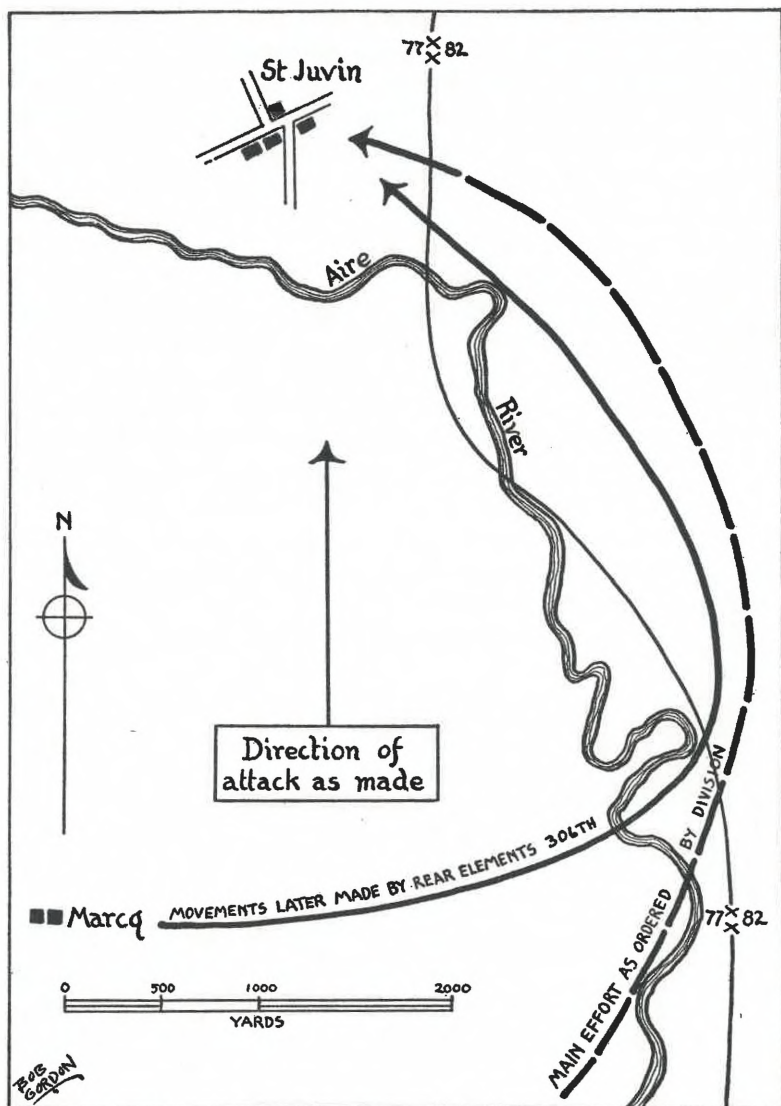
Why was this done? Probably because their training had more or less established it as a custom of the service, as a law of the Medes and the Persians, that an advance party moved in column of twos and a support in column of squads. Their orders had directed them to form an "advance guard," they were not under fire, and therefore they adopted one of the diagrammatic formations set forth in training manuals.

True this unit was entirely lacking in open warfare experience, having participated in only one attack and that from a stabilized position. It is also true that the intermingling of the 2d and 3d Battalions rendered command difficult. Nevertheless, common sense decried such a suicidal formation in the presence of the enemy.

The schematic solution was the worst possible in this particular case.

EXAMPLE II

The 77th Division on October 14, 1918, attacked the Germans north of the Aire River near St. Juvin. The hostile positions in this vicinity were strong, particularly against an attack from the south. Feeling certain that the German barrage and defensive fires were registered south of St. Juvin and the Aire River, the division commander planned to take the village by envelopment from the east and southeast, while one regiment made a frontal demonstration from the south. He decided that, under cover of darkness, troops could cross the Aire well to the south unobserved. Such an operation would require movement in the zone of the 82d Division on



Example II

the right, but the position of the 82d facilitated this maneuver. The 77th Division order accordingly specified:

"By maneuvering with its right in the area of the 82d Division it (the 77th Division) will attack St. Juvin from the south and the east."

This idea of maneuver, however, was not reproduced in the order of lower echelons, the troops being sent "straight against St. Juvin from the south," the direction that the division commander had particularly wished to avoid for the real attack.

The 1st Battalion 306th Infantry, which the division commander had expected to be directed against St. Juvin from the east, attacked straight from the south with the unfordable Aire between it and its objective. The hostile barrage and murderous machine gun fire from the slopes north of the Aire swept through the assaulting units in a wave of destruction. The attack stopped. At noon the situation was such that the division commander believed a serious repulse to be inevitable.

At this time the commanding officer of the 306th Infantry concluded that there was no chance of success if the attack continued along these lines. Therefore, after the failure of the frontal effort, this regimental commander, acting on his own initiative, directed the rear elements of his regiment to cross the Aire east of Marcq and make a flanking movement against St. Juvin. This maneuver was carried out and the town, the hostile position, and 540 prisoners were captured.

From *Memoirs of the World War*, by Major General Robert Alexander, who commanded the 77th Division at the time.

DISCUSSION

General Alexander emphasizes the fact that the attack, as launched at first, was merely frontal. It failed. Not until the regimental commander, acting on his own initiative, ordered troops to cross the Aire and strike the hostile position in flank was success achieved.

This division commander states that "evidently the malign influence of trench warfare doctrine, which in all cases depended upon a barrage and a straight push behind it" still controlled the minds of certain of his subordinates.

Cases where troops applied to one situation stereotyped methods

which had been developed in other situations were frequent in the World War. In the early days of stabilization we see infantry, without adequate fire support and without surprise, thrown frontally against heavily-wired positions that were held in force by a determined enemy with machine guns. Four years later, when conditions had changed, we see troops that had become accustomed to the idea of limited objectives, failing to take advantage of opportunities proffered in the open. Why? Because they sought to apply the doctrines and dogmas of stabilization to warfare of movement!

The Principles of War had not changed but the methods and technique of applying them had.

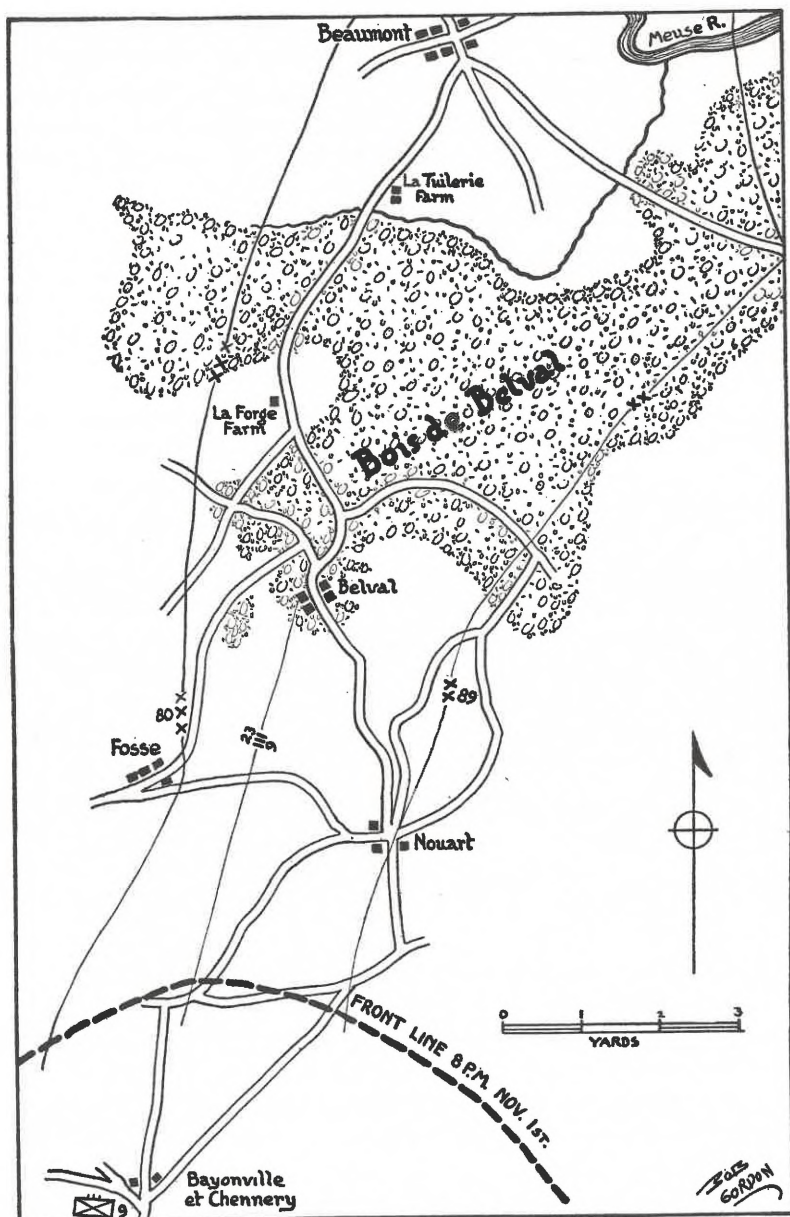
EXAMPLE III

On November 2, 1918, the 9th Infantry, part of the 2d U. S. Division, was in division reserve southwest of Bayonville et Chenery. An American attack which began on November 1 had achieved considerable success and the Germans appeared somewhat demoralized.

On the afternoon of November 2 the 9th and 23d Infantry Regiments (3rd Brigade) received orders to advance abreast, cross the front line at 8:00 p.m. and under cover of darkness move forward to the heights just north of the Nouart-Fosse Road. They would then organize this position and prepare for a vigorous pursuit.

The 9th Infantry, in the order 1st, 2d, 3d Battalions, moved out in column of twos along the Bayonville-Nouart Road toward the north, to the front line then held by the 4th Brigade, thence northeast. As the regiment came to the outguards of the 5th Marines it was informed that the enemy was still occupying the area to the immediate front, information which was soon found to be true.

The leading company (Company A) sent forward a patrol of several selected men which preceded the column by about 100 yards. Slowly the regiment moved forward. It passed through a long cut in the road. As the head of the column emerged from the cut, it ran into an enemy outguard of seven or eight men. These were promptly killed or captured and the regiment resumed its forward movement, this time protected by a deployed platoon to the front and by small groups from the leading company as flank



Example III

guards. Heavy fire was now received from the left. The column at once took cover while Company A deployed, moved against the enemy and drove him off. It was now midnight and the objective was close at hand. Accordingly, a halt was called until 5:00 a.m., at which time the regiment advanced a short distance and deployed on the designated line, Nouart-Fosse.

An attack was launched from this line and new objectives were reached without encountering serious opposition. Here another pause ensued.

Although German resistance was rapidly crumbling along the entire Western Front, the 9th and 23d found that a definite stand was being made a short distance to their front on the crest along the south edge of the Bois de Belval. Accordingly, American artillery was placed on this position and preparation made to take it.

The brigade plan was unusual. The 9th and 23d Infantry were ordered to *penetrate the German position by marching in column on the road* through the Bois de Belval and to seize and occupy the heights south of Belmont. The advance was to be supported by an artillery rolling barrage covering the road at 200 yards on each side.

The 9th Infantry began its forward movement about 4:30 p.m. in the following order of march: 3d Battalion and Machine-Gun Company forming advance guard, followed by the 2d and 1st Battalions, each with one company of the 5th Machine-Gun Battalion attached. It soon became dark. As the head of the advance guard approached the edge of the woods, a few hundred yards south of Belval, German machine guns opened fire from both sides of the road. Patrols sent to the left and right made short work of silencing these guns. At Belval the road was barricaded. This was cleared up and the regiment, in column of twos, moved on in the darkness and mud. Rain began to fall.

Frequent halts were made to intercept enemy detachments moving along the road and to verify the route. Several German speaking soldiers were placed at the head of the advance guard to hold the necessary brief conversation with any groups of the enemy that might be encountered. Several such groups were taken prisoner without firing a shot.

Just north of La Forge Farm the leading company of the advance guard surprised a large detachment of German troops who were in-

dustriously preparing a position from which they could cover a clearing in the forest. Sixty or seventy prisoners were taken.

The column continued, surprising a train bivouac and capturing an aid station. It arrived at the north edge of the wood at 10:45. At La Tuilerie Farm the officers and men of a German minenwerfer company were surprised and captured. Dispositions were then made to hold the ground won.

According to reports of prisoners and captured documents, the Germans had intended to hold the position near the south edge of the Bois de Belval for two days.

From the personal experience monograph of Captain Roy C. Hilton, Infantry, who at the time commanded the Machine-Gun Company, 9th

DISCUSSION

Here is a remarkable action. During a single night a regiment, in column and on roads, marched five miles through the enemy position! This feat becomes still more remarkable when we consider the fact that it was preceded by four years of stabilized warfare during which such an operation would have been classed as the height of insanity.

This plan was revolutionary. It was contrary to all the tedious rules that had been evolved while the war stagnated in the trenches. But, radical though it was, it did not violate the Principles of War. On the contrary it exemplified Surprise, Mobility, and the offensive.

The marches of the 9th and 23d have been praised by some while others have condemned them as poor tactics and dangerous gambling. However, the American commander's estimate of the extent of German demoralization and confusion was thoroughly upheld by the success obtained. Perhaps they *were* lucky, but be that as it may—we judge by results.

EXAMPLE IV

On October 29, 1918, the 2d Battalion, 61st U. S. Infantry, held a position south of the Andon stream. The ground, from the crest of Hill 299 to Aincreville, was a gentle downward slope, devoid of trees or brush. The Andon was easily fordable by foot troops.

The enemy held Aincreville. Hostile machine guns were placed



Example IV

about 250 yards in front of the town in a semicircular position. The Germans had prepared an artillery barrage to fall about 200 yards in front of their machine guns.

Although the Americans could hear voices and the rumbling of wagons in Aincreville, the strength of the enemy was unknown. Patrols could advance only a short distance before they were driven

off as the Germans signalled for their defensive barrage on the slightest provocation. This signal was a green star rocket. The artillery fire fell about two minutes after the rocket was fired.

Expecting that he would be ordered to capture Aincreville, the battalion commander made his estimate of the situation. His men were very tired. After a succession of long marches they had participated in operations from October 12 to 17 which resulted in heavy casualties and little success. Following this they had remained under artillery fire in division reserve a few days and then, after receiving a few slightly trained replacements, had relieved elements of the 3d Division in the front line on the night of the 26-27 October.

In view of the condition of his men, the battalion commander was doubtful of the success of a regular attack. There was no cover. An American artillery preparation would be certain to bring down the hostile barrage and cause the German machine guns to open. He was not at all sure that his weary men would advance through the German fire over open terrain. He did believe, however, that the Germans were equally tired and that if he could only get to close quarters with them the problem would be solved.

On the afternoon of October 29 the expected order arrived. It directed that one officer and one hundred enlisted men from this battalion attack and seize the town following a preparatory artillery and machine gun barrage. The battalion commander immediately proposed an alternative plan which was approved. This plan, based entirely on surprise, was imparted only to the officer directly in charge of the action and to four or five reliable sergeants. His scheme follows:

At 2.30 a.m., October 30, Lieutenant R. W. Young and 100 enlisted men from Company F would capture Aincreville by surprise.

The attack would jump off without any preparatory fire by artillery, machine guns, or accompanying weapons. The assault would be made in two waves. The sergeants who were in on the plan would follow the second wave to insure that all men went forward at the crucial moment and not back. The advance would be made silently. The battalion commander believed that these troops could reach a point within thirty yards of the line of machine guns before

being discovered. When the hostile machine guns opened up the attackers were to lie down and take cover. Lieutenant Young, with a German Very pistol and green star rocket, would then fire the signal calling for the German defensive barrage. All of the Americans knew this signal.

As soon as Lieutenant Young judged that the men had realized the meaning of the green star rocket, he was to yell: "Beat it for the town." In formulating his plan, the battalion commander believed that the assaulting troops on seeing this rocket would realize that they would not have time to regain their line before the German barrage came down in rear of them and that, therefore, their only hope of safety lay in reaching the town.

Arriving in town, the plan was to take cover in the houses and cellars, wait until morning and then "mop it up." Arrangements were made to report the capture of the town by rocket.

The unit on the left was directed to place a machine gun barrage on the western exit of the town, preventing German escape and diverting attention there. The signal for this barrage was to be the green star rocket fired by the attacking force.

The plan worked perfectly. The Americans advanced until halted by fire from one or two machine guns. They were close to the guns and in a line. The rocket went up and a voice shouted: "Beat it for the town, it's your only chance!" The men ran over the machine guns, leaped across the stream and entered the town where they were assembled and directed into houses and cellars. There were only one or two casualties.

Lieutenant Young was killed the next morning while supervising the mopping-up of the town.

From the personal experience monograph of Major Alexander N. Stark, Infantry.

DISCUSSION

Certainly there is nothing stereotyped about this plan. It is not customary to sit on a piece of ground where the enemy places his barrage and then send up a signal calling for that barrage. It is equally unusual to devise a deliberate surprise for your own troops. This plan worked, however, and that is the criterion by which an action must stand or fall.

It is possible that the town might have fallen before a daylight

assault well-supported by fire. Perhaps it might have been taken by a night attack more nearly conforming to the book. On the other hand, it is possible that the battalion commander was entirely correct in his estimate of the effort he could expect from his men at this particular time. The result obtained thoroughly justified the means employed.

CONCLUSION

Four examples have been given. Two show the dismal failure that resulted from the application of stereotyped methods and two set forth unusual plans that worked to perfection. In the former pair, the diagrammatic solutions that were employed actually violated basic doctrines, whereas the last two, bizarre though they were, conformed entirely with the Principles of War.

Every situation encountered in war is likely to be an exceptional situation. The schematic solution will seldom fit. Leaders who think that familiarity with blind rules of thumb will win battles are doomed to disappointment. Those who seek to fight by rote, who memorize an assortment of standard solutions with the idea of applying the most appropriate when confronted by actual combat, walk with disaster. Rather, is it essential that all leaders, from the subaltern to the commanding general, familiarize themselves with the art of clear, logical thinking. It is more valuable to be able to analyze one battle situation correctly, recognize its decisive elements and devise a simple, workable solution for it, than to memorize all the erudition ever written of war.

To quote General Cordonnier, a French corps commander: "The instruction given by leaders to their troops, by professors of military schools, by historical and tactical volumes, no matter how varied it may be, will never furnish a model that need only be reproduced in order to beat the enemy. . . .

"It is with the muscles of the intelligence, with something like cerebral reflexes that the man of war decides, and it is with his qualities of character that he maintains the decision taken.

"He who remains in abstractions falls into formula, he concretes his brain; he is beaten in advance."

CHAPTER IV: SURPRISE

Surprise is the key to victory. It is an essential element of a successful attack.

THE effect of surprise is decisive; therefore, much may be sacrificed to achieve it. It should be striven for by all units, regardless of size, and in all engagements, regardless of importance. When the squad opens fire it should do so suddenly, simultaneously and violently. When an army attacks it should strike from an unexpected direction, at an unexpected time, with unexpected violence.

When the enemy confidently expects a certain course of action his dispositions are made with the view of meeting that action. If, however, an unexpected plan be adopted the hostile dispositions and arrangements must be hastily improvised, and are therefore less effective. Concealment of the point of attack permits the offense to mass superior forces against a critical point before its action can be countered by a hostile concentration. Similarly, concealment of the time of attack prevents the defense from initiating appropriate counter-measures and, at the same time, adds tremendously to that moral effect which is the soul of offensive action.

Surprises gained by large forces in the World War are well known. For example, on July 18, 1918, the French and Americans surprised the Germans. The arduous efforts that the secret movements exacted of the attacking troops are generally familiar to the military reader.

On May 27, 1918, the Germans won an easy victory by surprising the French on the Chemin des Dames. The British and French surprised the Germans on August 8, 1918, "The Black Day of the German Army." In all these cases the precautions taken to insure secrecy were extreme and so were many of the chances. For example, on August 8, all the infantry of the French 42d Division formed for an attack in a block some 400 yards deep by 1,200 yards wide. If the Germans had suspected this, few of their shells would have missed. The formation was not discovered, however, and at the prescribed hour of attack the French infantry moved forward

in mass. It completely escaped the hostile counter-preparations and barrages, smashed through the German lines, advanced miles into enemy territory, and captured 2,500 prisoners. True this division took a chance, but it got away with it, achieved surprise, and made one of the most successful French attacks of the war.

The French spring offensive of 1917 failed chiefly because it lacked surprise. Many previous Allied offensives failed for the same reason. They had been too well advertised by days of artillery preparation.

Surprise is by no means a monopoly of the larger units. It applies with equal force to the squad as well as the army, and for both it is almost invariably decisive. Indeed, it is not too much to say that without surprise of some kind an operation will fail, or at best achieve but a limited and inconsequential success.

EXAMPLE I

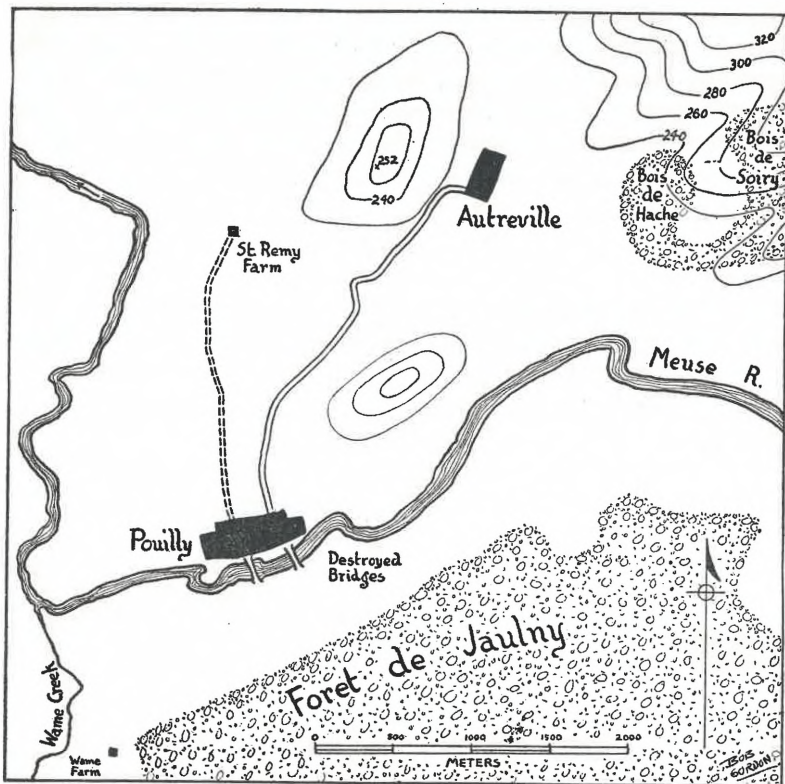
Advancing northeastward, the 356th U. S. Infantry, 89th Division, had reached the Meuse River on November 7, 1918, and the regimental commander, Colonel R. H. Allen, had been ordered to prepare a plan for effecting the crossing. Germans held the east bank.

Colonel Allen, in conjunction with engineers, selected a point for crossing. His plan was based primarily on surprise. Six captured German pontoon boats (borrowed, without leave, from the 2d U. S. Division) were to be used. The crossing was to be made at night just below the mouth of Wame Creek. A covering detachment of twenty-five men was to cross first and form across the neck of the river bend to stop hostile patrols.

Immediately after this the 1st Battalion would cross and push forward, in absolute silence, with rifles unloaded. They would pass to the south of Pouilly, cut the wire lines leading to the town, and seize the heights east of it. Later this battalion would continue to the high ground on the edge of the Bois de Soiry.

The 3d Battalion was to follow, pass around Pouilly and move to the Bois de Hache, sending one company to overcome organized resistance in Pouilly.

The artillery prepared concentrations on a time schedule carefully calculated to keep ahead of the infantry. However, until ord-



Example 1

ered by the regimental commander, all guns were to remain silent. Fire would be opened only on receipt of orders or on rocket signal from the regimental C.P. at Wame Farm. If this fire had not been opened by the time the 1st Battalion reached the Pouilly-St. Remy Farm Road, the artillery would fire on signal from this battalion. Similar arrangements were made for machine gun support—the machine guns to remain silent until the artillery opened.

A demonstration was planned at Pouilly. The river was shallow here and the Germans obviously expected an attack. A previous attempt had been made to build rafts near Pouilly and effect a crossing. The Germans had noted the preparations and had heard pounding. At the slightest movement in this vicinity they opened

fire. Full advantage was taken of this. Lumber for rafts was piled near the Forêt de Jaulny and imperfectly camouflaged. Each night men were detailed to hammer on boards in a quarry near Pouilly.

For the main crossing three boats were to be lashed together, thus making two rafts of the six pontoons. These were to be pulled back and forth across the river by ropes manned by shore parties of the 314th Engineers. The boats being of metal, hay and boards were placed in them to deaden the sound of hobnailed shoes. No commands were to be given. Absolute silence was to be enforced. Signals across the river were arranged by the engineers. A light telephone wire was attached to each end of the rafts. A vigorous jerk on the wire was the signal for the raft to be pulled across. The pontoons were to be hauled to Wame Creek and floated down to the Meuse.

Battalion and company commanders were given the detailed plan on November 9, but the remainder of the personnel were not informed of the scheme until shortly before its execution.

Certain changes were ordered by the division but, as a result of protest by Colonel Allen, these were reduced to a minimum. For instance, the division ordered an artillery preparation but the regimental commander felt that this would completely vitiate the element of surprise. He protested and as a result the artillery support he had contemplated in his plan remained in effect.

The crossing was ordered to be carried out on the night of the 10th. The demonstration staged at Pouilly succeeded beyond expectation. Practically all of the hostile artillery in the vicinity placed their fire on this area and kept it there during the entire operation.

At the real crossing, the first troops were ferried over at about 8:20 p.m. Soon after this some German artillery came down in the vicinity, whereupon Colonel Allen ordered the signal rocket fired and the American artillery and machine guns opened. Shortly after this the German artillery lifted and came down on the Pouilly area. Not another hostile shell fell near the ferry.

The crossing continued, generally according to plan, and was completely successful. Many prisoners were taken in Pouilly and Autreville. At the latter point an entire machine gun company was captured as it was falling in to move on Pouilly.

The 1st Battalion advanced to its objective through darkness and fog by compass bearing. This battalion and the 3d, which followed

it, had but few casualties. The enemy was completely taken by surprise.

The experience of the 2d Battalion of this regiment was very different. It had been ordered to move to a foot bridge where the 2d Division was crossing. It reached the designated bridge at 9:00 p.m., but had to wait until 1:00 a.m. before it could cross. The enemy discovered the movement. His artillery came down with deadly accuracy on the crossing and on the 2d Battalion. Most of the officers of this battalion, including the battalion commander, were killed or wounded, as were 232 men out of the 600 who had started the operation.

From the personal experience monograph of Captain A. S. Champeny.

DISCUSSION

Colonel Allen's plan was based on surprise. The unexpected succeeded as it almost always does.

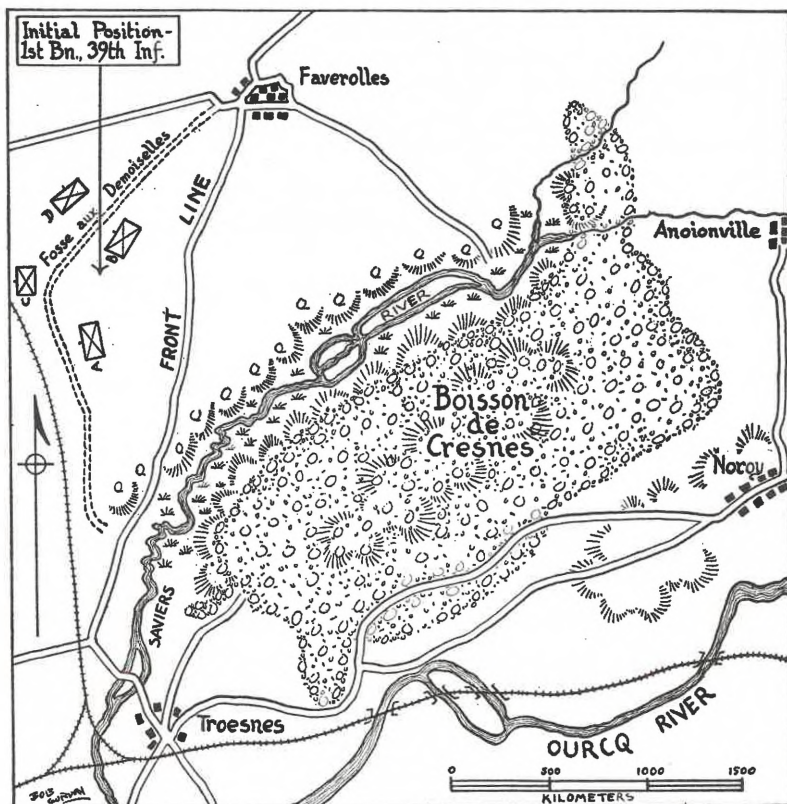
The Germans expected a crossing at Pouilly and the regimental commander took great pains to encourage them in that belief. For several days he fostered this idea in the minds of the Germans. The building of rafts nearby, the imperfect camouflage of lumber in the vicinity, the previous threat of a crossing, the nightly pounding on boards near Pouilly—all these confirmed the Germans in their belief. Further, since secrecy was the basis of the operation, the colonel strongly opposed the division's desire for an artillery preparation prior to the crossing. His views prevailed.

The sum total of all these precautions resulted in the 1st and 3d Battalions attacking in an unexpected manner from an unexpected place. The Germans were not even sure whether a crossing had been effected. That surprise was complete was clearly shown by the fact that practically no artillery fire was placed at the point of the actual crossing, whereas much artillery fired on the Pouilly area during the entire operation.

The disastrous effect of the lack of surprise upon casualty lists is shown by the experience of the 2d Battalion, which lost nearly one-half its men in crossing the same stream.

EXAMPLE II

Late on July 17, 1918, during the Aisne-Marne offensive, the 1st Battalion, 39th U. S. Infantry made a trying march to the front.



Example II

The men were very tired when they reached the front line which ran along the Faverolles-Troesnes Road.

Late that night an attack order was received. The battalion staff hastily examined maps. Diagonally across the battalion front flowed the Savieres stream. Beyond the stream rose the densely wooded ridge of the Buisson de Cresnes, which was believed to be strongly held by the enemy. The regimental commander, decided to take his objective, which was the Buisson de Cresnes, by attacking with the 1st and 3d Battalions abreast, the 1st on the left.

The 1st Battalion did not make any reconnaissance of the ground to the front. On the map, the Savieres appeared too insignificant to occasion any difficulty in crossing. The battalion attack order was

issued, therefore, without reconnaissance. Companies A and B were placed in assault and C and D in support. Company C 11th Machine-Gun Battalion was directed to follow the right support company. The Faverolles-Troesnes Road was designated as the line of departure.

The American attack was scheduled to jump off at 5:30 a.m. while the French, in adjacent zones, were to attack at 4:30 a.m., an hour earlier. The idea was to pinch out the formidable Bois de Cresnes by a simultaneous advance on each side of it. The Americans would then drive forward and mop up the wood.

At 4:30 a.m. the French attacked. Coincident with this, German artillery and trench mortars placed heavy concentrations on the American front line. At 5:15 a.m. the 1st Battalion was informed that the American hour of attack had been set back to 8:00 a.m.

At this hour the battalion moved forward. The hostile bombardment had ceased. Not a sound was heard as the men moved down a long, wheat-covered slope toward the Savieres. Finally, the assault companies broke through a fringe of trees and scrambled down a bluff to the river.

There it was discovered that the Savieres, which had appeared so insignificant on the map, was swollen by heavy rains to twice its normal width and depth. The banks on each side had become deep and difficult swamps.

Companies A and B, continuing the advance, became intermingled and forthwith fell into the greatest confusion, not 200 yards from the hostile position. The floundering, the splashing, and the shouting made enough noise to alarm every German in the Marne salient, but strangely enough drew no hostile fire.

Finally, a few patrols, armed with automatic rifles, succeeded in crossing the swollen stream. One of these killed or drove off the crew of an enemy machine gun that was just about to go into action. The noise of this sudden burst of fire spurred the other men to greater effort and the crossing was at last effected.

The battalion was promptly reformed and pushed on into the Buisson de Cresnes. It advanced rapidly, meeting surprisingly little resistance. Not until later in the day was strong opposition encountered.

Late that day a captured German sergeant was questioned in regard to the situation. He explained the lack of opposition at the crossing of the Savieres and at the Buisson de Cresnes by saying that the Germans had not expected anyone to be daring enough or foolhardy enough to attempt an attack over the flooded and swampy Savieres in broad daylight. Therefore the Germans had massed their machine guns and organized the ground on the northern and southern approaches to the woods where the ground was firm and the cover suitable for an attack.

From the personal experience monograph of Captain Walter B. Smith, who, at the time, was Battalion Scout Officer of the 1st Battalion, 39th Infantry.

DISCUSSION

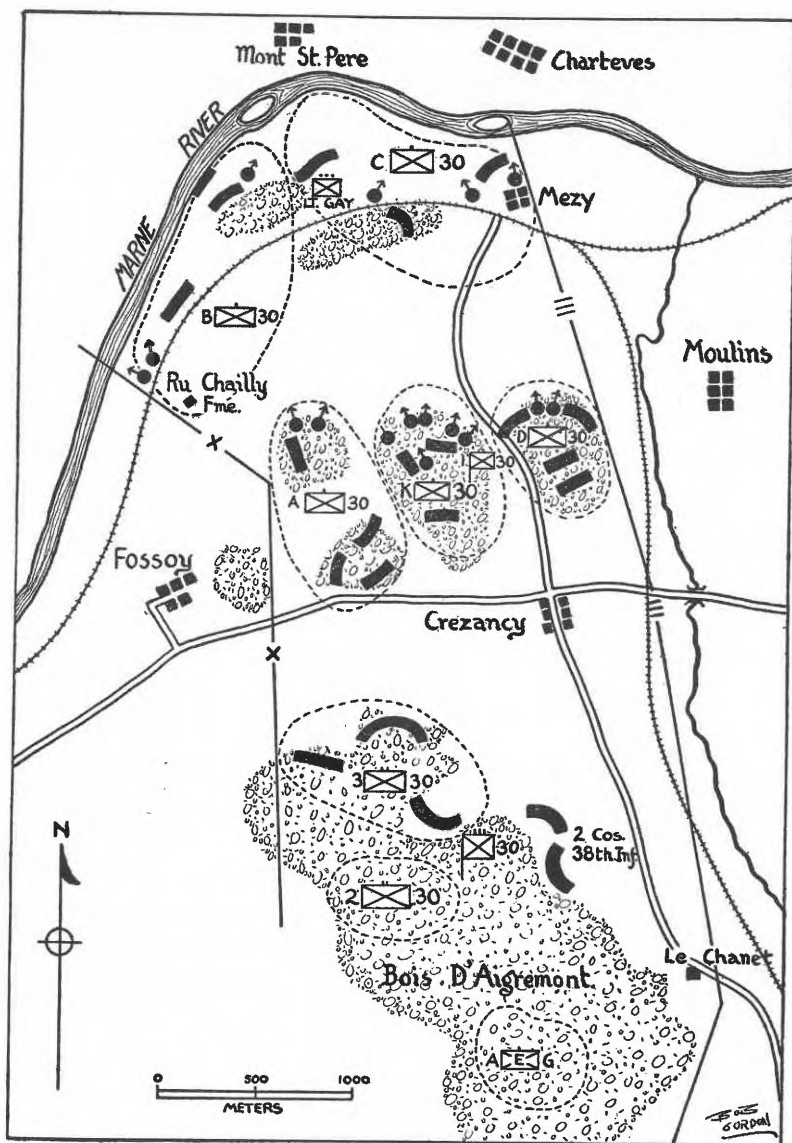
The Germans had made a painstaking, logical estimate of the situation. They had placed their strongest defense where an attack seemed most probable. Opposite the 1st Battalion of the 39th, where an attack appeared incredible, they had only a handful of troops.

Thus, when the Americans, purely by chance, blundered into the illogical solution, the Germans were caught completely off guard. After floundering through a marsh where a few well-placed machine guns could have stopped a regiment, the battalion captured a strong position—a position so strong, so formidable, that it was almost undefended. Seemingly illogical and poorly executed though it was, the attack succeeded because its unexpectedness outweighed all errors of plan and execution.

The battalion was unquestionably lucky. The failure to reconnoiter and to ascertain the true condition of the Savieres should, by all odds, have resulted in a bloody repulse. Instead, it resulted in a brilliant success. Why? Because the attacking troops, by stumbling into the unexpected and the improbable, achieved the supremely decisive element of surprise.

EXAMPLE III

On July 14, 1918, the 4th Platoon, Company A, 30th Infantry, was holding a small wood, about 100 yards wide by 200 or 300 yards deep, located northeast of Fossoy. In front of this unit, near the Marne, scattered platoons of the 30th formed an outpost.



Example III

About midnight, July 14-15, the Germans north of the Marne opened a terrific artillery bombardment but the 4th Platoon escaped without casualties. At dawn the bombardment ceased but rifle and machine gun fire could still be heard. Fog and smoke obscured the view of the river. Men coming back from other organizations said that the Germans had crossed the Marne.

Some time later, as the fog and smoke lifted, the platoon leader saw some German infantry coming toward his position in an approach-march formation. They were near the railroad. The platoon leader did not open fire. The German infantry and machine gunners came on at a slow walk and as steadily as though on a drill ground. An officer walked at their head, swinging a walking stick.

The American platoon leader waited "until the Germans came as close as the British did at Bunker Hill, perhaps 30 yards." He then gave the order to fire, and the men opened up all along the line at point-blank range. To use his own words, "The automatic rifle squads made their chauchats rattle like machine guns."

The Germans fired only a few shots. Two Germans, who were trying to get a light machine gun into action, were very conspicuous. They were literally riddled with bullets. Nearly every man in the platoon claimed to have killed them. The enemy took what cover they could find and later withdraw to the Marne.

The American platoon leader stated that approximately 40 Germans were killed (as determined by a count made later) and an undetermined number wounded. The platoon consisted of six squads.

From a statement by Lieutenant William C. Ryan, 30th Infantry, who commanded the 4th Platoon, Company A 30th Infantry, at the time.

DISCUSSION

Surprise can be obtained in the defense as well as in the attack. The surprise effect was gained in this action by withholding fire until the enemy had advanced within 30 yards of the position, then opening suddenly and simultaneously.

Had Lieutenant Ryan opened fire when he first saw the Germans he might have stopped them farther from his position but he would undoubtedly have failed to crush the attack so decisively. The

strength of the assaulting Germans cannot be stated definitely, but presumably they were a depleted battalion of the 398th Infantry.

Lieutenant Kurt Hesse, adjutant of the 5th German Grenadiers, tells of a similar experience in his description of the fighting along the Marne on this day. His unit, committed against troops of the 3d U. S. Division, apparently the 38th Infantry, was similarly surprised by fire at point-blank range. He says:

"I have never seen so many dead. I have never seen such a frightful spectacle of war. On the other bank, the Americans, in close combat, had completely annihilated two of our companies. Lying down in the wheat, they had allowed our troops to approach and then annihilated them at a range of 30 to 50 yards. 'The Americans kill everyone,' was the cry of fear on July 15—a cry that caused our men to tremble for a long time."

EXAMPLE IV

The 2d Battalion, 127th U. S. Infantry, 32d Division, relieved other troops in the Bois de Baulny on the night of October 3-4, 1918. On the morning of October 4 it took part in a general attack as an assault battalion. Its first objective was the Bois de la Morine and the Bois de Chene Sec.

The attack was supported by artillery and machine guns but soon broke down under heavy and accurate German machine gun fire. Several fresh attempts were made during the day to resume the attack with the aid of further artillery preparation, but all of these failed. The battalion suffered fairly heavy losses.

During the night orders were received to resume the attack at 6:00 a.m. A heavy fog covered the ground the next morning when the battalion jumped off. When the attack reached the Gesnes stream machine gun fire was encountered, but this was high and ineffective. The battalion reached a point 100 yards from the Bois de la Morine with only a few casualties. From this point a frontal attack was launched in combination with a flanking attack by two platoons from the east. The position along the forward edge of the wood was successfully carried and the battalion pushed on the north edge of the Bois de Chene Sec, where it was halted and reorganized. About 100 prisoners were taken.

From the personal experience monograph of Major Ralph W. Dusenberry, Infantry.

ing. Thus the movement on the second day contained the element of surprise.

Terrain which is rendered impassable by hostile fire, when visibility is good, may frequently be negotiated when the advancing troops are concealed by darkness, fog, or some artificial screening agent. Leaders must, therefore, be prepared to take prompt advantage of unusual weather conditions that offer sudden and golden opportunities. Thus may they achieve surprise.

CONCLUSION

Though all leaders recognize the decisive value of tactical surprise, it does not follow that all leaders are able to achieve it. Too often are routine methods adopted with the idea that surprise will result. Too often are schemes, that have gained surprise several times in the past, relied upon to gain that same surprise again. Usually they end in failure. For instance, prior to July 15, 1918, the Germans made several successful attacks, gaining surprise each time. On July 15, however, the same methods failed. This time the French took effective counter-measures against tactics that had become stereotyped. The German tactics were the same that had brought them earlier success but they had now lost all the decisive qualities of the unexpected. Failure resulted.

The importance of varying methods cannot be overemphasized. Often the good standard solution, particularly if it be the obvious one, will not be as effective as some other solution that possesses many seeming disadvantages, but has the transcending quality of—*the unexpected.*

Tactical surprise is usually the reward of the daring, the imaginative, and the ingenious. It will rarely be gained by doing the obvious.

CHAPTER V: MOBILITY

**Open warfare demands mobile, elastic tactics
—quick decisions and quick maneuvers.**

MOBILITY includes far more than mere rapidity of movement. From the leader it demands prompt decisions, clear, concise orders, anticipation of the probable course of action and some sure means for the rapid transmission of orders. From the troops it requires promptness in getting started, ability to make long marches under the most adverse conditions of terrain and weather, skill in effecting rapid deployments and abrupt changes of formation without delay or confusion, facility in passing from the defensive to the offensive or the reverse, and, finally, a high morale.

In brief, then, mobility implies both rapidity and flexibility.

EXAMPLE I

In the early days of the World War the 35th Fusiliers, part of the German IX Corps, made the following marches:

August 23—13.1 miles.

August 18—25 miles.

August 19—6.2 miles (Battle of the Gette).

August 20—21.9 miles.

August 21—6.2 miles.

August 22—7.5 miles.

August 23—28.1 miles.

August 24—10 miles (Mons).

August 25—18.7 miles.

August 26—12.5 miles (Battle of Le Cateau).

August 27—21.9 miles.

August 28—23.8 miles.

August 29—5 miles (Fighting on Somme).

August 30—15.6 miles.

August 31—20.6 miles.

September 1—18.8 miles (Fight at Villers Cotterets).

September 2—8.8 miles.
September 3—20.6 miles.
September 4—18.8 miles (Fight at Montmirail).
September 5—15.6 miles.
September 6—(Battle of Marne).
September 7—23.1 miles (Battle of Marne).
September 8—20.6 miles (Battle of Marne).
September 9—(Battle of Marne).
September 10—20 miles.
September 11—18.1 miles.
September 12—7.5 miles (Battle of Aisne).

DISCUSSION

In 27 consecutive days the 35th Fusiliers marched 408 miles, an average of 15.1 miles a day. This period included at least ten battle days and no days of rest. All marches were made under full pack.

On September 7 and 8, in the movement to attack the north flank of the French Sixth Army, this regiment marched 43.8 miles with only one three-hour halt. The entire march was made under the most difficult traffic conditions.

From the *Militär Wochenblatt*, February 25, 1932.

EXAMPLE II

On May 30, 1918, the 7th Machine-Gun Battalion of the 3d U. S. Division was training near La Ferte-sur-Aube. This battalion was a motorized unit but the motors were of unsuitable design and the personnel had had comparatively little training in handling them.

At 10:00 a.m. an unexpected order directed the battalion to proceed at once, using its own transportation, via Arcis and Sezanne, to Conde-en-Brie. This order was occasioned by the advance of the Germans toward the Marne on the days following their successful attack on the Chemin des Dames.

A warning order was promptly issued. Troops were recalled from drill, extra trucks were borrowed, and at 2:30 p.m. the column cleared La Ferte. The trucks were found to be seriously overloaded. On steep hills the men had to detruck and, in some cases, push. Tires were old and punctures many. Delays were frequent. Motor-

cycles proved valuable in carrying spare parts to broken down trucks.

About 9:00 p.m. a short halt was made near Sezanne in order to rest the men, refuel and overhaul the cars. Thereafter no lights were used. At daybreak the column encountered refugees who crowded the roads and made progress difficult. Nearer the front, infantry, artillery and supply wagons appeared in the intervals between the refugees. At 12:30 p.m. May 31 the head of the battalion halted at Conde-en-Brie, having made 110 miles in 22 hours, over congested roads. The battalion arrived at Chateau-Thierry, went into position in the afternoon, and at dawn engaged the Germans.

From the personal experience monograph of Major John R. Mendenhall, Infantry.

DISCUSSION

In this case mobility was obtained by transporting the troops in motors. Although the equipment was deficient, and traffic conditions difficult, this battalion, approximately 24 hours after its first warning, had covered considerably more than 100 miles and deployed in position against the enemy.

EXAMPLE III

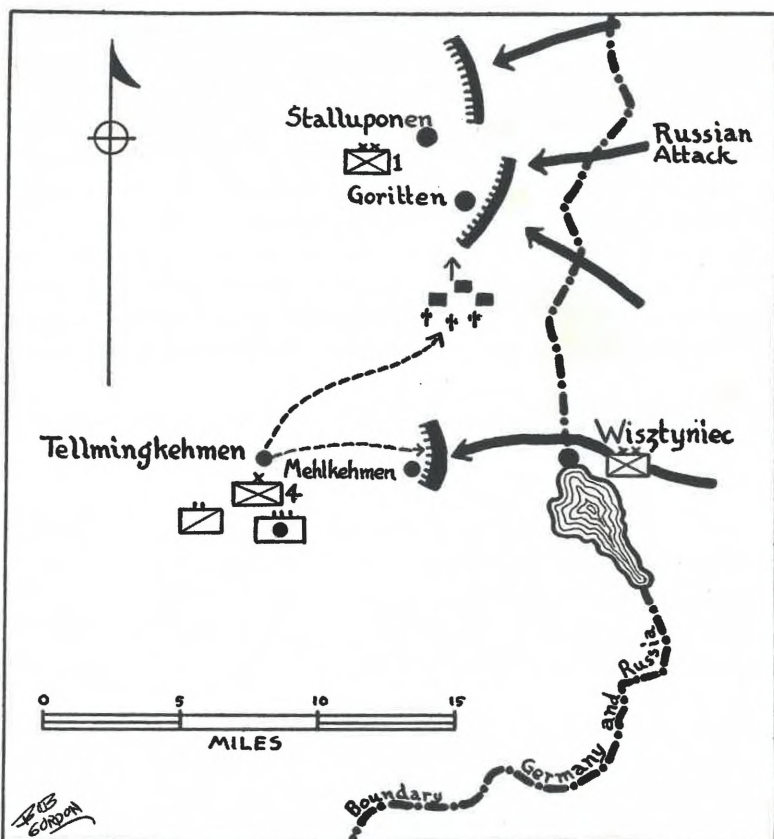
On August 17, 1914, detachments of the German I Corps were disposed on the East Prussian frontier with the main German forces concentrated well in rear. A strong Russian advance was in progress from the east.

The I Corps had been given a covering mission but its commander believed in an aggressive defense.

The 4th Infantry Brigade, a squadron of cavalry, and a regiment of field artillery were located at Tollmingkehmen. To the north, elements of the 1st Division covered a wide front east of Stallupönen.

The situation, as known to the Tollmingkehmen detachment early on the 17th, was as follows:

The elements of the 1st Division, to the north, were engaged against much stronger Russian forces. Their situation was serious. The south flank of this fighting was some eleven miles from Tollmingkehmen.



Example III

The Tollmingkehmen detachment had been assembled.

According to reliable information, a Russian division advancing from Wistyniec toward Mehlkehmen, was now but a few miles away.

The German commander at Tollmingkehmen at once decided to contain this Russian division with a small force and with the bulk of his command, move north and strike the southern flank of the Russians who were attacking the 1st Division elements near Goritten.

He sent two battalions of the 45th Infantry, a squadron of cav-

alry and a battery of field artillery against the Russian advance from Wistyniec, with orders to stop the Russians at Mehlkehmen at any cost.

With the 33d Infantry, one battalion of the 45th Infantry and five batteries of artillery he marched to the northeast, arriving in the vicinity of the fighting about 11:30 a.m. The detachment promptly attacked toward Goritten directly against the rear of the enemy. The effect was immediate. The Russians withdrew in disorder, and some 3,000 prisoners were taken. German losses were slight. The delaying detachment to the south carried out its mission, holding the Russians at Mehlkehmen the entire day.

From *Tannenberg*, by General von Francois, German Army, and the Reicharchiv account.

DISCUSSION

Although the Russians were vastly superior in numbers, they were overwhelmed by their faster-thinking, faster-moving opponent. A quick decision, a rapid arch, and a sudden attack from an unexpected quarter completely routed them.

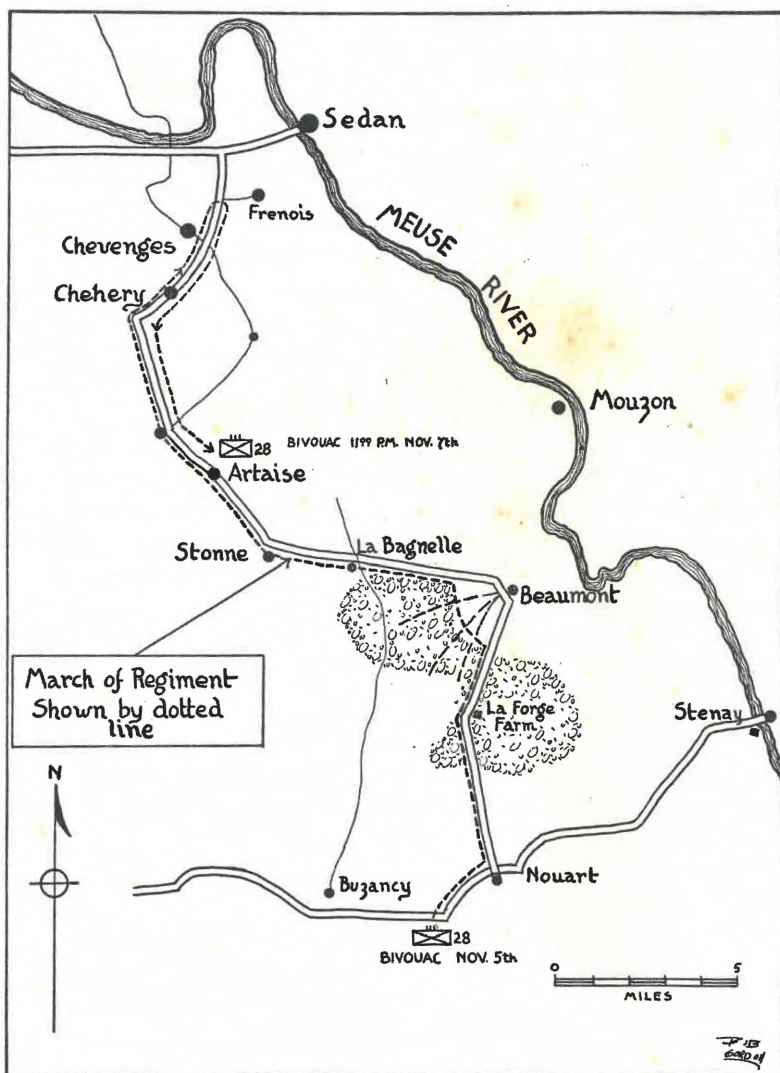
Had the German forces at Tollmingkehmen not been moved north promptly, the result would probably have been a successful defense east of Tollmingkehmen, and a reverse near Stalluponen.

The German commander at Tollmingkehmen made a prompt decision. He put his weight into the main effort. His confidence in the superior mobility of his troops and in the ability of a weak detachment to effect the required delay near Mehlkehmen was justified.

EXAMPLE IV

On November 5, 1918, the 28th U. S. Infantry, part of the 1st Division, was in bivouac about three miles east of Buzancy. The division was in corps reserve. The Germans were withdrawing.

About 2:30 p.m. the regiment received a warning notice stating that the 1st Division would relieve the 80th Division that night and that orders for the movement would be issued later. The troops were given a hot meal, packs were rolled, and a tentative march order prepared. By 4:30 p.m. all arrangements were complete; the regiment was in readiness, waiting only for the receipt of the order to move out.



Example IV

About 5:00 p.m. a written message was received, directing the command to march, at once, to the vicinity of Beaumont, via Nouart and La Forge Farm. The regimental commander was instructed to report to the brigade commander at La Forge Farm for further

orders. A few minutes after this message arrived, the regiment was in motion.

The march was difficult; roads were muddy and slippery. Streets in Nouart were narrow and were congested by units of the 2d and 80th Divisions. As the regiment neared La Forge Farm artillery and ammunition trains again congested the route. The road meandered through thick woods and over marshy ground; shell holes and fallen trees blocked the way; in many places the mud reached halfway to the knees. Fields and ditches, bordering the road, were filled with water. Owing to these conditions the men were frequently constrained to march in column of twos. Rest periods were few and a comparatively steady rate of march was maintained (about one and one-third miles an hour for a large part of the march).

When the regiment reached La Forge Farm further orders were received directing the 1st Division to attack toward Mouzon on the morning of 6 November. The 28th Infantry was ordered to occupy a position in the woods two miles west of Beaumont and south of the Beaumont-Stonne Road.

When the leading element reached Beaumont, it discovered that a bridge over which the column would have to pass, had been destroyed and that the exits of the village were being shelled by guns from positions east of the Meuse. A map was produced and studied. It indicated that the regiment could reach its prescribed position by marching two miles across-country, in a northwesterly direction. The regimental commander adopted this plan.

It was too dark to pick up any landmarks. A compass bearing was therefore given to each battalion commander. Three unimproved roads (shown on the map), that ran across the route of march, furnished a check on the distance. When the third road was crossed, the regiment would be near its destination.

The going was heavy. The fields were wet and soggy; fences had to be cut; ditches and shell holes barred the way and to add to the difficulties, the enemy steadily shelled the area through which the column was passing, making it necessary to extend the distances between units. One or two casualties were incurred.

Dawn was breaking when the column reached the third road. The terrain did not check with the map! The regiment was halted and an officer was sent down the road toward Beaumont. He

managed to orient himself. Instead of the three roads shown on the map, there were four. The Germans had built one for use in transporting supplies to the front. The command was marching in the right direction and had only a short distance to go. The march was resumed and the regiment went into the designated position at the required time. It had marched 19 miles at night, 17 over a muddy and congested road and 2 across country.

The attack, meeting but little resistance, the 28th Infantry was held in brigade reserve. About 4:00 p.m., this same day, the regiment received a telephone message from the brigade commander, in substance as follows:

"The brigade is going on a long march. Move out at once on the Beaumont-Stonne Road toward Stonne. The regimental commander will report to me in person at the crossroad at La Bagnelle for orders. The 26th Infantry will be withdrawn and follow you in column."

In a few minutes the regiment was again en route. Orders received at La Bagnelle directed that the 1st Division march on Sedan in five columns, reach the hills southwest of that city and attack at daylight. The 28th Infantry and Company D 1st Engineers were ordered to march via Stonne-Chemery-Frenois. The artillery was directed to follow the columns that were to meet on the position southwest of Sedan.

Neither the location of the enemy front line nor that of friendly units, other than the division, were definitely known. The brigade commander therefore planned to move forward in route column, preceded by an advance guard, push through such resistance as might be encountered with as little extension as possible, with the object of attaining the heights near Sedan and attacking at day-break.

The regimental commander was ready with his orders when his organization arrived. The regiment marched all night. About 7:00 a.m. fire was encountered from a position near Chevenges. The regimental commander, who was with the advance guard commander, at once ordered an attack. The approach march was taken up. The attack progressed beyond Chevenges to within two or three miles of Sedan.

At 11:00 a.m. orders were received to halt the advance and

organize the ground for defense. The orders were transmitted to the battalion commanders within a few minutes. About 4:00 p.m. the regiment was ordered to withdraw to the vicinity of Artaise, as it was not desired that the 1st Division enter Sedan. The last units of the regiment arrived in Artaise about 11:00 p.m.

From the personal experience monograph of Major William G. Livesay, Infantry.

DISCUSSION

Between 5:00 p.m. November 5th and 11:00 p.m. November 7th, the 28th Infantry marched or fought without food or sleep. It covered 33 miles. The operation consisted of a night march into position for battle, a march in pursuit with an advance guard, development, attack, transition from the offensive to the defensive, and withdrawal.

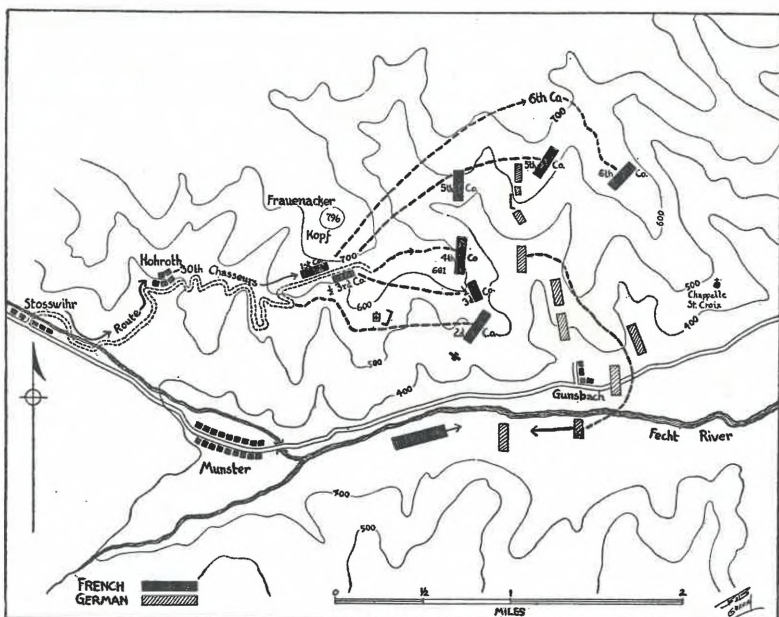
The success of these operations, while made possible by the physical efficiency, high morale, and spirit of both officers and men, must also be largely attributed to good troop leading. Warning orders were issued. Instructions were anticipated. In each case, the regiment was able to move immediately on receipt of the order. The regimental commander was directed to *put his troops in march toward a certain point*, and then told where to report for further instructions. His order did not delay the move.

In spite of conditions that made progress slow and difficult—a rate of only one and one-third miles an hour being maintained much of the time—the regiment covered 19 miles. This could not have been done had time been wasted in issuing elaborate march orders, or by failure to take prompt, positive action when the column encountered unforeseen difficulties.

Rapid decisions, prompt orders, intelligent foresight and high morale are factors that play a tremendous part in the mobility of any unit.

EXAMPLE V

On August 19, 1914, the 30th French Battalion of Chasseurs, with one battery of artillery attached, was ordered to move east from Stosswihr, along the north side of the Fecht, in order to cover the debouchment of other troops. One battalion of the 152d Infantry was assigned a similar advance and mission, south of the



Example V

river. The 30th Battalion consisted of six companies of well-trained, well conditioned troops, ready for any eventuality.

German covering forces were near and combat was imminent.

The valley of the Fecht is about a mile wide. The valley, itself, is relatively flat and open, but is dominated on both sides by steep, wooded hills. The secondary valleys, entering the Fecht from the north, are pronounced depressions. Progress through the woods by deployed units would be slow.

The battalion commander estimated the situation. His plan was: few troops in the valley, effort on the slopes of the north bank to envelop any resistance met, and the use of the crests as successive objectives. He explained his general idea before the march started and issued the following order (in part):

"The battalion will follow the road: Stosswehr-Hohroth-Frauenackerkopf, and then, without losing height, will move parallel to the valley. Order of march: 4th, 5th, 6th, 2d, 3d, 1st Companies.

"The 4th Company, advance guard, will deploy astride the route

followed as soon as the enemy is met; the 5th, then the 6th will deploy to the north.

"The 2d Company will deploy to the south, keep liaison with the 4th Company and cover the valley road.

"The 3d and 1st Companies will be in reserve.

"The battery will move behind the 2d Company, keeping generally near the south edge of the woods, abreast of the reserve. The machine-gun platoon will also follow the 2d Company."

About 8:00 a.m. the 4th Company, near 661, encountered an enemy force to its front and deployed, as did the 2d Company. The 5th Company at once moved to the north, deployed two platoons and advanced against resistance. The 6th Company, farther north, meeting no enemy, moved forward.

Along most of the front the French deployed more rapidly than their opponents, whom they could see fanning out under their fire. This was particularly true on the north flank where the French definitely had the advantage of being the first deployed. Here an envelopment was made and the Germans were taken under a converging fire. Meanwhile, the French battery and machine guns had promptly gone into action, directing their fire against German elements in the open valley.

In spite of the fact that the Germans were supported by artillery the French envelopment progressed. About 3:30 p.m. the 6th Company arrived on the spur northwest of Chapelle St. Croix and turned southward, surprising a command post and the German elements that were located there. The Germans withdrew rapidly.

About 2:30 p.m. a strong German attack in the valley, near Gunsbach, failed. As a result of this repulse and the progress of the French envelopment, the Germans withdrew in confusion. The French pushed on and reached their assigned objective.

The French battalion, assisted by fire of the battalion of the 152d south of the Fecht, had defeated the 121st Wurtemberg Reserve Regiment and some elements of the 123d and 124th.

From Infantry Conferences by Lieutenant Colonel Touchon, French Army.

DISCUSSION

Here is an instance where a battalion commander regulated his deployment in advance. His maneuver had been carefully planned in the event the enemy was encountered—fire in the open valley,

maneuver in the covered area. He realized that the negotiation of such steep slopes as those along the Fecht would be a slow and fatiguing job, even for his hardy alpine troops. Therefore he wisely began the climb before gaining contact with the enemy but without deploying. Thereby he saved his men and increased his speed.

That the French were able to deploy faster than their opponents, was largely because of the almost automatic start of their maneuver. A few shots and the movement got under way. No time was lost in making decisions and issuing orders.

Those cases in which a prearranged deployment can be used, will be few. Situations seldom develop in accordance with preconceived ideas. Nevertheless this action graphically illustrates the tremendous advantages, particularly that gained by rapid deployment, that accrued to the French as a result of their previously planned course of action.

The defeat of this larger and stronger German force may be directly attributed to the superior mobility of the 30th French Battalion. This superior mobility resulted from two things: (1) the excellent performance of the troops, who were well-trained and in good physical condition; (2) the foresight of the battalion commander.

Infantry should be able to deploy quickly and without confusion. To achieve this, the rapidity of the leader's decision must correspond to the rapidity of the troops' execution.

CONCLUSION

The physical marching ability of troops is an important factor in mobility, but it is only a part. Rapid decision and clear, quick orders by the leader are vital. No less important are the requirements demanded of the troops: prompt execution of orders, rapid deployment, quick changes of formation, observance of march discipline and the ability to read maps and march by compass.

Superior mobility must be achieved if we are to surprise our opponent, select the terrain on which we are to fight, and gain the initiative. There is no alternative. If we are slow in movement, awkward in maneuvering, clumsy in deployment—in a word, not mobile—we can expect to be forestalled, enveloped, or constrained to launch costly frontal attacks against an enemy advantageously posted.

CHAPTER VI: TERRAIN

In the absence of definite information small infantry units must be guided by their mission and by the terrain.

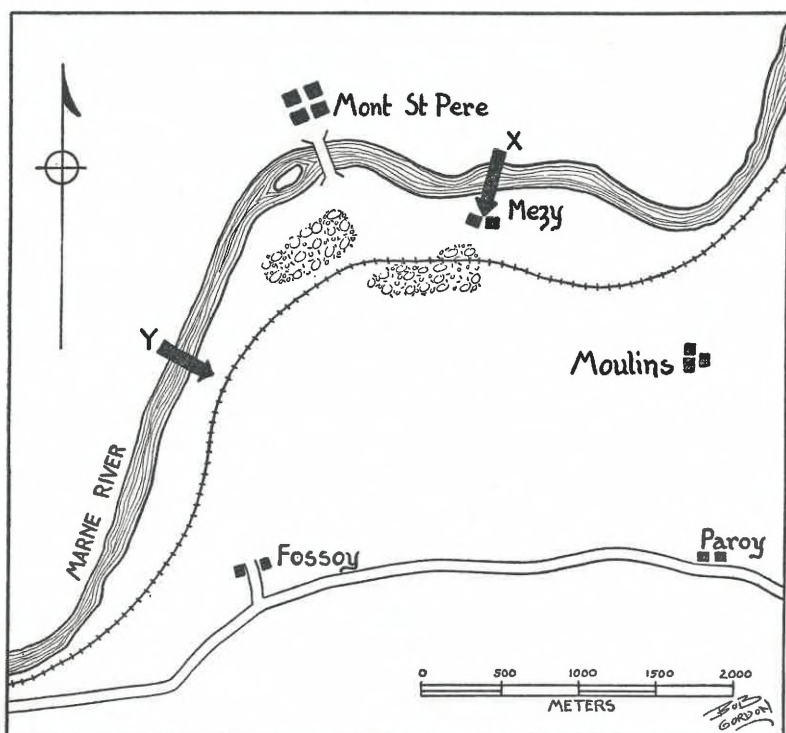
MANEUVERS that are possible and dispositions that are essential are indelibly written on the ground. Badly off, indeed, is the leader who is unable to read this writing. His lot must inevitably be one of blunder, defeat, and disaster.

On the other hand, the intelligent leader is aware of the fact that the terrain is his staunchest ally. Realizing that it virtually determines the formation and scheme of maneuver, he will constantly study it for indicated lines of action. For instance, there may be no evidence of the enemy, yet the terrain may say clearly and unmistakably, "If you come this way, beware! You may be enfiladed from the right"; or it may say, "Right-o! This way to the hostile position"; or again, "Close your formation here or a platoon or two will be lost."

Although small infantry units cannot choose the terrain over which they will attack or on which they will defend, they can make the best use of it. For example, a small infantry unit may find portions of its assigned zone devoid of cover. It will seldom be desirable to attack over such exposed ground. It is usually better to fix the enemy by fire in such a locality and utilize more favorable portions of the allotted area for the advance. On the defense a unit may find that part of the terrain to its front is open and presents a splendid field of fire while another part affords good cover by means of which the enemy may be able to work up close to the position unobserved. This covered approach fairly shouts, "Hold me strongly—this is the danger point." The ground is an open book. The commander who reads and heeds what it has to say is laying a sound foundation for tactical success.

EXAMPLE I

On July 15, 1918, the 1st Battalion, 47th German Infantry participated in the attack against the 3d U. S. Division south of the



Example 1

Marne. This battalion crossed the Marne at a bridge near Mont St. Pere. Other units, utilizing crossings at X and Y, had gone before with orders to clear the ground in front of the 47th.

The battalion commander had no information whether or not this had been done. The situation was vague and his battalion was the first unit to cross the bridge. A few hundred yards in front of the battalion was a railway embankment and a small clump of woods. Between the river bank and the woods the ground was open, with very little cover. The battalion, in route column, continued its advance toward the railway embankment. It was suddenly surprised by heavy, close-range, rifle and machine gun fire and virtually destroyed as a combat unit for the day.

From the battle report of the 1st Battalion, 47th German Infantry.

EXAMPLE II

On August 4, 1918, the advance guard of the 7th U. S. Brigade, consisting of elements of the 39th Infantry, approached the Vesle River. German artillery had been firing from the north bank earlier in the day. The last 1,000 or 1,500 yards, before reaching the Vesle, offered little or no cover. The ground was under excellent observation from the commanding heights north of the river. The situation was vague.

The advance guard moved forward on the road. The advance party, in column of twos, almost reached the river bank. It was followed by the support in column of squads. German artillery suddenly opened with deadly accuracy and inflicted heavy losses.

From the personal experience monograph of Major M. S. Eddy, Infantry.
(The foregoing incidents are described in more detail elsewhere in these studies.)

In each of these two cases the situation was vague but the terrain clearly decried the maneuver which was actually carried out. A danger signal was displayed. It was ignored. In each case, failure to take the possibilities of the terrain into account was roundly and soundly punished.

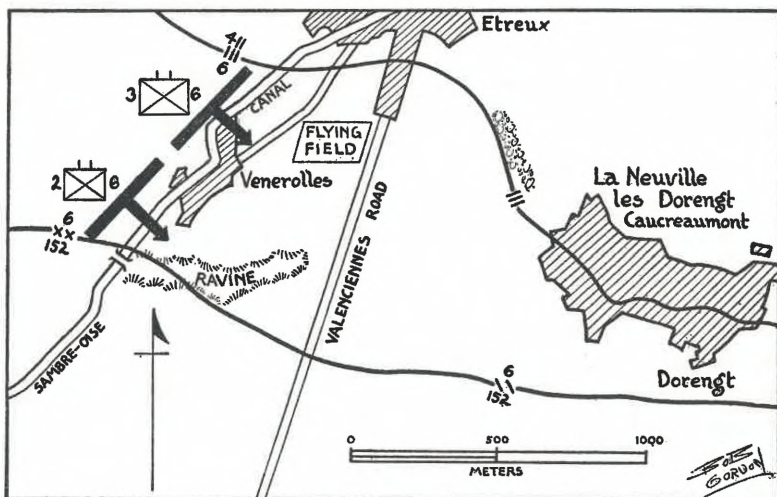
EXAMPLE III

On November 4, 1918, the French 6th Infantry, with the 152d Division on its right and the 411th Infantry on its left, participated in an attack across the Sambre-Oise Canal. The 2d and 3d Battalions were employed in assault, the 2d on the right.

By 7:30 a.m. the 3d Battalion had captured the north portion of Venerolles, reorganized and stood prepared to renew the advance. The 2d Battalion was still mopping up the southern part of the town. On the north, the 411th Infantry had advanced rapidly, captured Etreux and pushed on. Right elements of the 411th were approaching the long rectangular wood between Etreux and La Neuville-les-Dorenge. Other units of the 411th were still farther advanced. The attack gave every indication of a brilliant success.

East of Venerolles, in the central portion of the 3d Battalion's zone, lay a flying field—flat and bare. East of the Valenciennes Road an interlacing network of thick hedges divided the ground into many enclosures. Some slight cover existed south of the field.

Without effective artillery support, the bulk of the 3d Battalion attempted to advance straight across the bare aviation field. It encountered a deadly machine-gun fire. With tremendous losses and in the utmost confusion, it was driven back to Venerolles. So great was this battalion's demoralization that it was unable to resume the attack for many hours.



Example III

The repulse of the 3d Battalion had its effect on the 2d, constraining the latter to advance at a snail's pace. It was 1:00 p.m. before the 6th Infantry succeeded in crossing the Valenciennes Road.

Shortly after 9:00 a.m. leading elements of the 411th Infantry reached the eastern edge of Caucreaumont, but the slow progress of the 6th Infantry permitted the Germans to concentrate their reserves against the 411th, with the result that, at midnight, this regiment was 400 yards in rear of the point it had reached at 9:00 a.m.

Although the attack had proved successful the French were unable to exploit it.

From the account in the *Revue D'Infanterie*, January 1, 1928, by Major Janet, French Army.

DISCUSSION

The dislocation of the 6th Infantry's attack, which in turn compromised that of the entire division, appears to have been caused by the brash attempt of the 3d Battalion to cross terrain that was utterly devoid of cover without the assistance of effective artillery support.

Although the French were not aware of the German dispositions to their front, one glance at the terrain should have shown them the danger ahead. If the battalion moved out across the flying field and the Germans did happen to be on the other side, that battalion would be in a bad way.

The rapid advance of the 411th Infantry indicates that a maneuver either to the north or south combined with fire action across the aviation field would have been effective. The 3d Battalion, however, in utter disregard of the terrain, took a chance and advanced in the open with the result described. The bulk of the casualties in the 6th Infantry on November 4 were sustained by this one battalion in its few disastrous minutes on the flying field.

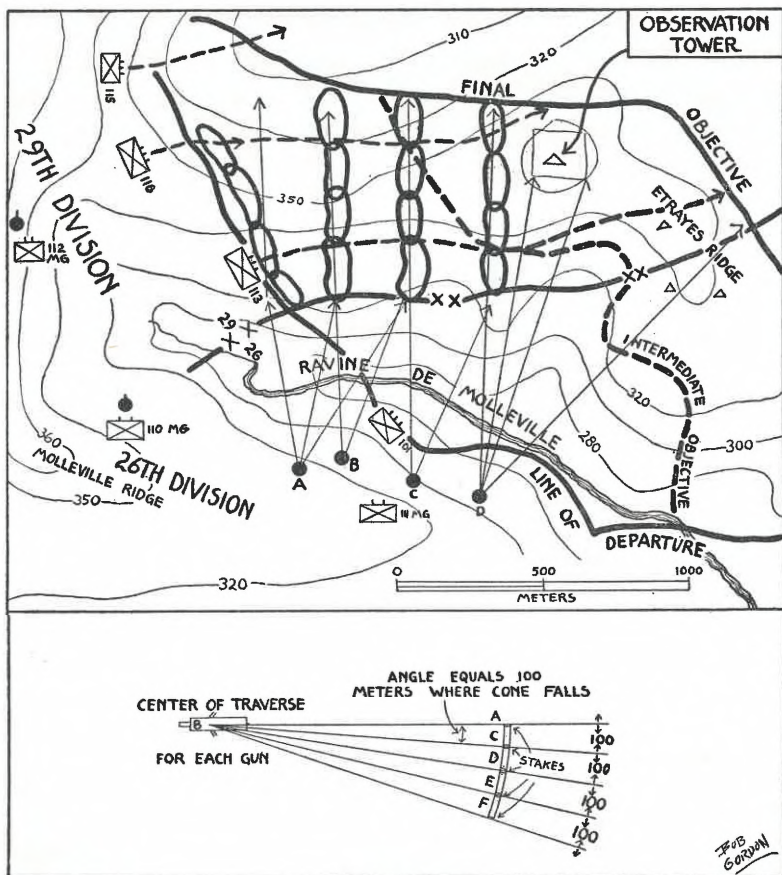
Infantry unsupported by artillery or tanks has practically no chance of success in a daylight advance over bare, open terrain against hostile machine-gun fire.

EXAMPLE IV

The 29th U. S. Division, advancing to the north on the east bank of the Meuse, was brought to a halt on Molleville Ridge, the eastern extremity of which is generally parallel to Etrayes Ridge. Between these two ridges runs the deep Molleville Ravine. The southern and western slopes of Etrayes Ridge are sparsely wooded. The American front line ran as shown on the accompanying sketch with the 26th Division on the right of the 29th.

Orders were received directing the 29th Division to take Etrayes Ridge. The following description of the attack launched on October 23 is taken from an article in the INFANTRY JOURNAL of August, 1927, by General L. S. Upton and U. S. Senator Millard E. Tydings:

"The 101st Infantry, 26th Division, was to attack from the position shown on the sketch, turning east of north. Six hundred meters northwest of it the 1st Battalion 113th Infantry (29th Division)



Example IV

was to attack working due east. This left a triangular section between the 113th and the 101st Infantry which was not covered. The Germans in this sector were to be cut off by the junction effected by the battalions of these two regiments on the objective. The 116th and 115th Regiments of the 58th Brigade were to advance as shown on the sketch, changing directions so as to face north on the objective. The 110th, 111th and 112th Machine-Gun Battalions supported the attack from positions shown on the sketch.

"I saw the opportunity to employ machine-gun barrage from

Molleville Hill and directed Major Millard E. Tydings to work out the details for the employment of an interlocking barrage paralleling the line of advance. He worked out the problem in the following manner:

"Major Tydings' task was to keep his parallel barrage 150 meters in advance of the attacking infantry. On the sketch are four black dots, A, B, C, and D. These represent four machine-gun batteries of four to six guns each. In front of each gun, at a distance of about ten meters, he placed a number of stakes in a semi-circular row. By traversing the guns through the angles formed by these stakes, each gun gave a beaten zone 100 meters wide and 100 meters deep. The beaten zone consisted of four to six interlocking zones, one for each gun of a battery, which made a continuous zone of fire before the 113th and 116th Regiments.

"The batteries were approximately 200 meters apart and the guns in each battery were three or four meters apart. The problem was one of indirect fire. Each battery commander had to have his guns well in hand in order to control his fire and be sure that none of it got into the line of advancing infantry but always preceded it. Batteries C and D had to fire over the heads of the battalion of the 101st Infantry, but at the jump-off these troops were well below Battery D and the line of advance was up a steep hill.

"The 101st Infantry had to attack up a hill approximately 250 feet high, while the 113th Infantry attacked on fairly level ground with a saddle running generally east and west.

"The attacking troops dropped back from their line of departure before H Hour to allow the artillery barrage to fall on the German line which was close up. The machine guns took advantage of this movement and at 5 minutes before H Hour, Battery A put down its interlocking zone just in front of the line of departure.

"At H Hour each gunner swung his gun so that his line of sight was directly over Stake A (Chart). This placed his cone of fire 125 meters in advance of the line of the 113th Infantry. Batteries B, C, and D were silent, and except for two men at each gun, all were concealed under available cover. The artillery and machine-gun barrages were synchronized to the rate of advance of the infantry, 100 meters in 10 minutes. Each machine gunner traversed slowly and steadily. At the end of ten minutes they were firing

over Stake C (Chart) and their beaten zone had traversed 100 meters on the ground and was still 125 meters in advance of the Infantry. Each gunner continued to traverse; from Stake C to D in ten minutes, then to Stake E in ten minutes more, reaching Stake F forty minutes from H Hour.

"When Battery A had completed forty minutes firing it ceased and Battery B commenced. Reaching their intermediate objective, the troops were halted and reorganized. There was no machine-gun firing during this halt. It was Battery D's mission to fire if it should be necessary. Six minutes before the jump-off from the intermediate objective, Battery D concentrated all its fire on Hill 361 where the German observation posts were located. At one minute before the jump-off it switched its fire back to the zone last fired on by Battery C and then resumed its mission of covering the advance of the infantry to the final objective. Here its fire was placed 100 meters in advance of the objective.

"As soon as Battery A completed its firing, it withdrew. It was followed in succession by the other batteries as they completed their missions.

"The 111th Machine-Gun Battalion fired approximately 300,000 rounds of ammunition during this attack. None of its personnel was killed and but few were wounded. The casualties were kept low by the successive withdrawal of each battery when through firing.

"The 113th Infantry captured about 50 machine guns in its zone of advance. These guns were in brush piles and were sited down the Molleville Ravine. None were sited for barrages but were laid for short range work down the paths through the woods.

"The losses of the attacking infantry of the 29th Division were light. The effectiveness of the machine-gun barrage drove the German gunners from their pieces and enabled the infantry to advance with slight opposition. It was a good illustration of the importance of fire superiority and of the ease of winning a fight when this has been established. It proved that the flank barrage of machine guns, carefully laid and timed, was a major factor of success in the attack."

DISCUSSION

The results achieved in this attack were due, almost entirely, to an appreciation of the possibilities proffered by the terrain. General

Upton says: "The conditions of the attack gave a rare opportunity for a flank barrage of machine-gun fire generally paralleling the line of advance."

It was the ground and its relation to the front line that made this unusual and highly effective type of machine-gun support possible. As told, it all appears simple and obvious. The terrain was there and the relative positions of the opposing forces offered the opportunity. In this case it was recognized. Too often such opportunities pass unnoticed. After the disaster has occurred or the favorable chance gone by, some one usually suggests what might have been done. It is too late then. Opportunities presented by the terrain must be seen and utilized before they are repudiated by the chance and change of war.

Consider the experience of the 3d French Colonial Division. On August 22, 1914, this unit blithely advanced across the Semoy, (a stream that was fordable in only one or two places) and plunged into the forest north of Rossignol. To its right front the ground was open and completely dominated the bridge on which the division was effecting its crossing. The location of the enemy was unknown but some German cavalry had been encountered.

The terrain fairly screamed that machine guns and artillery be emplaced to cover the division and that every means of rapid reconnaissance be utilized to search the ground commanding the defile. This mute warning was either ignored or not seen.

The divisional artillery, once across the Semoy and approaching the forest, found itself on a road flanked on both sides by swampy ground, hedges, and ditches. If the enemy were encountered, the artillery could do practically nothing.

The enemy was encountered, both to the front and the right front. The artillery, unable to leave the road, was helpless. That part of the division which had crossed the Semoy was cut off and captured or destroyed.

The French had had ample time to occupy the key points beyond the river but they failed to do so. They had been afforded an opportunity to select their battlefield but let the opportunity slip by. They neglected the possibilities of the terrain and, as a result, fought under most unfavorable conditions.

CONCLUSION

The ability to read the writing of the ground is an essential to the infantry leader. In open warfare he will never be able to arrive at a detailed idea of the hostile dispositions. He can, however, see the ground. He can see where enemy weapons are likely to be located. He can see critical points from which a few well-emplaced machine guns can knock his attack into a cocked hat. He can see what areas the enemy can cover effectively and what areas are difficult for him to defend. He can pick out the routes of advance which permit effective fire support by his own supporting weapons. From this study of the ground he can plan his attack, make his dispositions and send back requests for definite artillery missions.

So it goes. If we have a clear idea of the enemy's dispositions, which will be seldom indeed, we will attack him, taking the terrain into consideration. If his dispositions are obscure and the situation vague we can still solve the problem. *By attacking the terrain, we can effectively attack the enemy.*

CHAPTER VII: MIRACLES

Resolute action by a few determined men frequently has a decisive effect in battle.

TIME AND AGAIN mere numbers have been overcome by courage and resolution. Sudden changes in a situation, so startling as to appear miraculous, have frequently been brought about by the action of small parties. There is an excellent reason for this.

The trials of battle are severe; troops are strained to the breaking point. At the crisis, any small incident may prove enough to turn the tide one way or the other. The enemy invariably has difficulties of which we are ignorant; to us, his situation may appear favorable while to him it seems desperate. Only a slight extra effort on our part may be decisive.

Armies are not composed of map-problem units, but of human beings with all the hopes and fears that flesh is heir to. Some are natural leaders who can be relied upon to the limit. Some will become conveniently lost in battle. A large proportion will go with the majority, wherever the majority happens to be going, whether it be to the front or to the rear. Men in battle respond readily to any external stimulus—strong leadership or demoralizing influences.

Thus we sometimes see companies of 170 or 180 men reduced to 50 or 60 a few minutes after battle has begun. The real strength of such a company has not been cut to a third by casualties; it has suffered perhaps, but not in such heroic proportion.

Every army contains men who at the first chance will straggle and at the first alarm, flee to the rear, sowing panic and disorder in their wake. They tell harrowing tales of being the only survivors of actions in which they were not present, of lacking ammunition when they have not squeezed a trigger, and of having had no food for days.

A unit can be seriously weakened by the loss of a few strong characters. Such a unit, worn down by the ordeals of the battle-

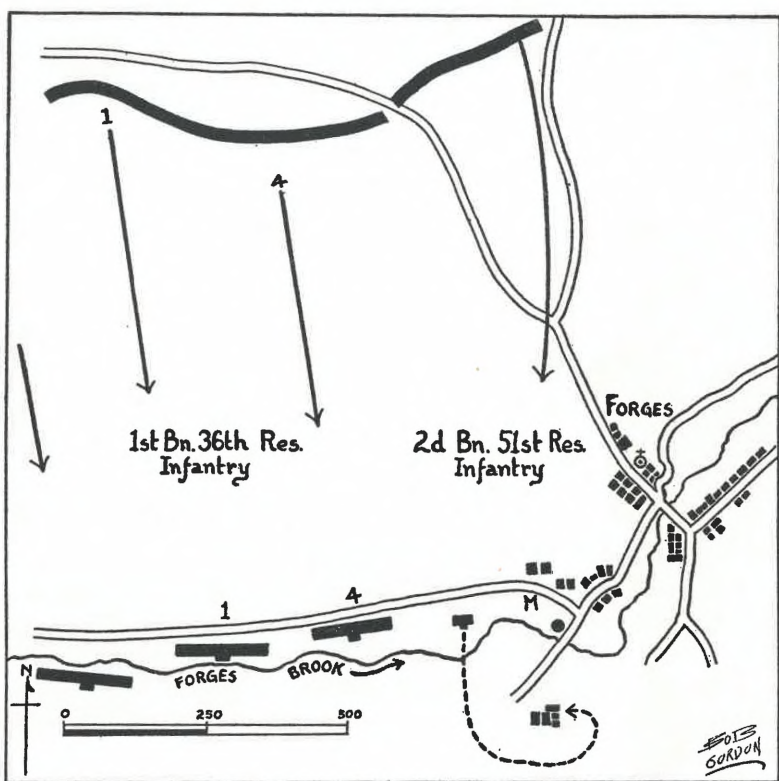
field, is often not a match for a smaller, but more determined force. We then have a battlefield "miracle."

It is not the physical loss inflicted by the smaller force, although this may be appreciable, but the moral effect which is decisive.

The familiar exploits of York and of Woodfill afford striking examples of what one or two individuals can accomplish in combat, when resolute action is accompanied by tactical efficiency.

EXAMPLE I

In the Verdun offensive the 38th German Reserve Regiment, on March 6, 1916, attacked to the south. The 1st Battalion of the 38th Regiment was ordered to take the high ground south of the



Example I

Forges Brook while the 2d Battalion 51st Reserve Regiment, on its left, took Forges.

The 4th Company, the left assault company of the 1st Battalion, reached the Forges Brook but here it was held up by machine-gun fire from the village of Forges on its left flank. The 2d Battalion of the 51st was still engaged in a hard fight to the left rear against the defenders of the village.

Sergeant Glodecks, with three men, was on the left flank and somewhat separated from the 4th Company. A few fruit trees afforded him concealment from the direction of Forges. By careful observation Glodecks discovered that the principal fire holding up the 4th Company came from a house southwest of Forges.

He briefly told the men with him what he had learned. He then told them that he had decided to infiltrate forward and take this house from the rear. At his command the men made a quick rush to the Forges Brook. They waded the icy, breast-deep stream, crawled forward past the house, turned to the left and prepared to attack. Their movement apparently had not been discovered.

At Glodecks' command the four threw grenades, then rushed the house from the east. They surprised and captured 20 Frenchmen. This allowed the 4th Company to advance.

Glodecks and his three men, taking along their prisoners, advanced northeast through Forges. A party of 18 Frenchmen was surprised and captured as a result of the unexpected direction of this small group's advance. Continuing through Forges, Glodecks' party took 130 more prisoners. This permitted the 2d Battalion of the 51st Regiment to capture the town.

From an article in *Kriegskunst in Wort und Bild*, 1929, page 145.

DISCUSSION

The moral effect of a sudden attack from the rear caused the French to give in at a time when they were offering stubborn resistance to an attack from the front. They had undergone hours of bombardment. They had faced a violent attack. Perhaps some of their natural leaders had become casualties. At any rate, their will to resist suddenly broke.

Why didn't the French laugh at the Germans and disarm them? There were enough Frenchmen, even unarmed, to have overpowered

their German captors. Physically there was nothing to prevent it; morally there was much.

Evidently the German sergeant was a determined man. The account says he had the confidence of all the men in the company, and was known as a clear-thinking soldier. His three comrades were either men of the same caliber or, as is often the case, the determination of the sergeant had been imparted to them.

Once more on the battlefield the action of a few men had proved the decisive factor.

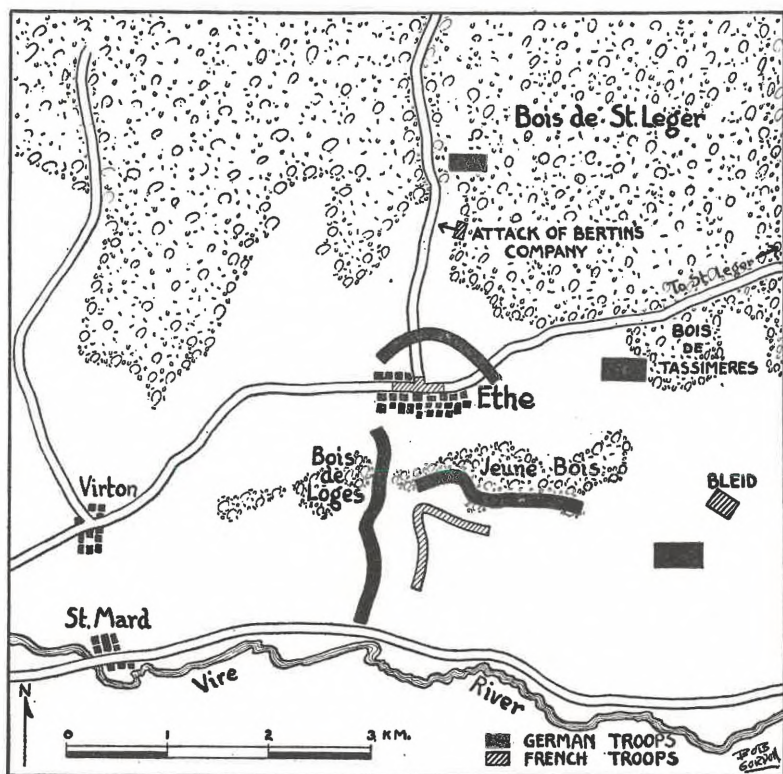
EXAMPLE II

On the afternoon of August 22, 1914, the situation of the French 7th Division appeared desperate. Its leading brigade, the 14th, in Ethe, was almost surrounded by Germans. Units were intermingled, casualties were heavy and the town was on fire. The 13th French Brigade was south of the Jeune Bois with Germans on three sides. German artillery on the heights north of Ethe ruled the battlefield and had cut communication between the two French brigades. A German force, estimated as a brigade, was assembled at Bleid, after having annihilated a flank guard battalion of the 13th French Brigade. French artillery support had been ineffective.

Captain Bertin and his company of some 80 men were in the Bois de St. Leger where they had been cut off from the rest of the French. He decided to make a detour to rejoin his own troops. About 2:00 p.m. he reached the edge of the woods as shown on the sketch.

In front of him, at close range, he saw German batteries firing to the south. German local reserves were scattered over the terrain. Groups of German officers were observing the action in and around Ethe. The French company had not been observed. Bertin knew almost nothing of the general situation.

Captain Bertin and his company attacked. They captured two batteries, shot down horses and gunners, and pushed on toward the west—almost to the command post of the 10th German Division. Here a counterattack, by hastily gathered runners, engineers, and infantry, and led by the German artillery brigade commander, finally dispersed the French company. Most of the French were killed or captured. Only a few managed to escape.



Example II

Let us now note what followed. The commander of the 10th German Division became worried about his left flank. The troops at Bleid consisted of the 53d Brigade of another army corps and there had been no communication between these troops and the 10th Division. Actually the French in Ette were almost at the mercy of the 10th German Division and the 13th French Brigade was about to begin a withdrawal to escape a threatened double envelopment.

Fortunately for the French, the commander of the 10th German Division did not realize this. He had received pessimistic reports concerning the unit on his right and now his left seemed to be threatened. For all he knew the attack of Bertin's company might

be the forerunner of a powerful French effort against his left flank. Late in the afternoon he ordered a withdrawal of the entire division to the woods north of Ethe. The French division escaped.

From *Ethe* by Colonel Grasset, French Army

DISCUSSION

The German 10th Division commander did not realize the favorable situation of his division. Pessimistic reports from corps, the death of the chief of staff at his side, heavy losses, and the failure of communication with the unit on his left contributed to his gloomy impression.

The psychological effect of Bertin's attack coming at this time undoubtedly helped the German division commander make up his mind to withdraw. Emerging from the forest, shooting down gunners and horses, pushing right up to the divisional command post, this company destroyed itself, but there is little question that it played an important part in saving the French 7th Division.

In this case the French captain could not realize how far reaching his decision might be. He did not know the desperate situation of the French or the strength of the Germans. He was alone and unsupported. He knew that the chances were against the ultimate escape of his company. Yet fortune offered him an opportunity to do a great deal of damage to the enemy, and he did not hesitate to seize it.

EXAMPLE III

On July 31, 1918, Company B 47th U. S. Infantry was attacking northward near Sergy. It was the right assault company of its battalion. The unit on the right having temporarily ceased its advance, this flank became exposed. Enfilading machine-gun fire was received from this direction as well as artillery fire from the right front.

Company B, together with the rest of the battalion, was stopped by this fire. Losses became heavy. The platoon leader of the right platoon was killed and all the noncommissioned officers of the platoon were killed or wounded.

Private Walter Detrow saw the situation. He immediately assumed command on the right of the company and led that part of

the line forward in the face of heavy machine-gun fire. The company slowly fought its way forward, destroying machine-gun nests and their crews. By noon it had reached the road leading from Nesles to Fere-en-Tardenois.

From the personal experience monograph of Captain Jared I. Wood, Infantry.

DISCUSSION

The successful advance of Company B may be directly attributed to the indomitable will of Private Detrow. While he did not achieve a spectacular personal triumph, his action, nevertheless, multiplied the real strength of the Americans many times. His spirit and determination so inspired the rank and file that an officerless unit, which had been shot to pieces under the murderous enfilade fire of machine guns, drove forward and destroyed those guns and their crews.

If an organization loses its commissioned and noncommissioned personnel it usually ceases to function as an effective combat unit. And yet, in this instance, the action of one private galvanized a moribund command and carried it forward to victory.

Private Detrow, as a sergeant, was killed in action in October, 1918.

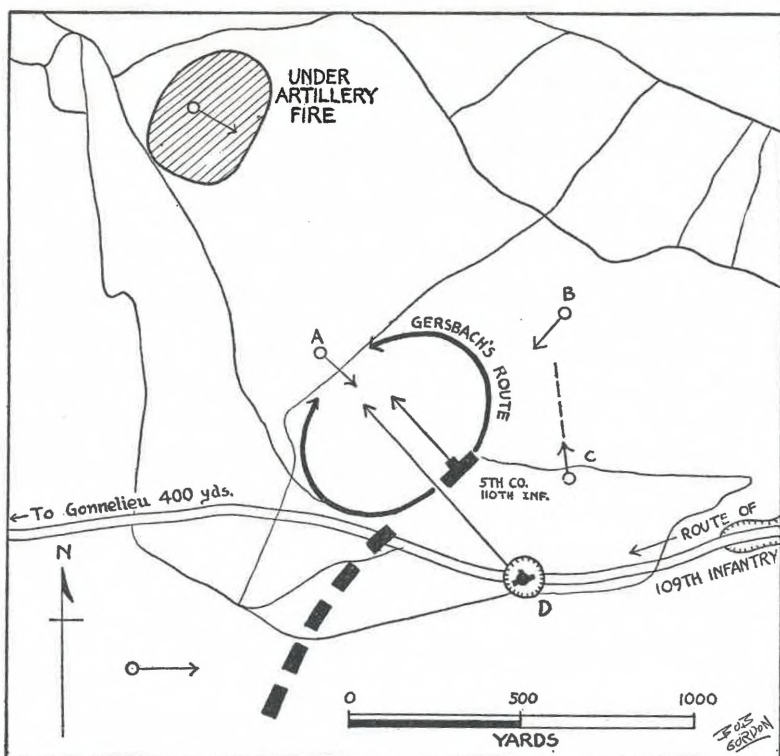
EXAMPLE IV

The Germans attacked the British at Cambrai on November 30, 1917. The 2d Battalion 109th Infantry drove deep into the British position but was finally stopped a short distance east of Gonnelleu by British machine guns.

Brave attempts to push on failed. Squad and platoon leaders reported that the support of accompanying weapons and artillery was necessary if further progress was to be made. The regimental commander tried to get artillery fire but the British and Germans were too intermingled. He then arranged to resume the attack with the support of heavy machine guns and minenwerfers.

The 5th Company 110th Infantry, which had been following in reserve, was pushed forward into the front line through depleted elements of the 109th. It was ordered to attack a machine-gun nest at A. The following arrangements had been made:

Two German heavy machine guns from positions near C sought to neutralize the English machine-gun nest at B. Artillery fired on



Example IV

a machine-gun nest northwest of A. A minenwerfer placed in a shell hole at D fired on the English nest at A.

Under cover of this fire the 5th Company attacked. Some elements went straight forward, while small groups endeavored to work around the flanks of the nest at A.

Sergeant Gersbach of the 5th Company led a squad on the right. Each time a minenwerfer burst on the English nest, Gersbach and his group made a short rush forward. The German machine guns beat down the fire of the English nest at B, eventually silencing it. Gersbach and his group progressed slowly. Several men were hit but the others, encouraged by the example of their leader, continued on. Meanwhile a similar group was working forward on the left flank.

Gersbach finally reached a trench leading to the nest at A. With two or three men he turned to the left, attacked the nest with hand grenades, and captured it. A breach was thus opened in the English defenses. Thereafter this was widened, and the 109th Infantry continued its attack successfully. The fight for the nest at A lasted two hours.

From an article in *Kriegskunst in Wort und Bild*, page, 215, 1928, dealing with the historical basis of the German regulations.

DISCUSSION

The discussion in the above mentioned work, which deals with the continuation of the attack within a hostile position, says in part:

"From nest to nest, the squad leader, in conjunction with neighboring rifle and light machine-gun squads, continues the attack, supported by the fire of heavy infantry weapons which have been brought up in support. The squad leader strives to get on the flank of such of the enemy as still resist."

The article states that troops in the heat of battle discovered the suitable methods of carrying forward the attack within the hostile position. It emphasizes the necessity for coördination of effort, the support of minenwerfer and heavy machine guns to neutralize enemy nests, and then adds:

"Success, however, was always brought about through the flank-
ing action of courageous, small groups."

The incident illustrates several things. First, the difficulty of getting artillery support on the nearest enemy once the hostile position has been penetrated. Second, the action of the leader in co-ordinating his supporting weapons with his attacking riflemen. Third, the use of machine guns to neutralize the enemy on the flank and the use of curved trajectory weapons to fire on the position being directly attacked. Fourth, the fact that such fights frequently develop slowly and last a long while. The fight for this one machine gun nest lasted two hours.

Coördination is important, supporting fires are necessary, but above all there must be the determined leaders and the "courageous small groups."

CONCLUSION

One of the examples discussed rivals the case of Sergeant York. Four men take more than a hundred prisoners and decide a bat-

talion combat. One example demonstrates the moral effect of determined action by a group of men, although their heroic attack ended in death or capture. One incident illustrates the moral effect that decisive action by one man may exert on many. And one typical case portrays a brave enemy overcome by the flanking action of "courageous small groups." The first two are more striking in that one decided a battalion fight and the other may have saved an entire division. During the World War the last two, with slight variations, were reproduced in many armies hundreds of times. Time after time companies and battalions, nailed to the ground by hostile fire, had the way opened to them by the action of one or two men.

Strength of will and resolute action rather than mere numbers play the decisive rôle in combat.

CHAPTER VIII: DECISIONS

A leader must meet existing situations with prompt and unequivocal decision. He cannot wait for the ideal situation to develop.

DECISIONS in war are difficult. More often than not they must be made in obscure and uncertain situations. Frequently the time at which a decision should be made permits a greater problem than the decision itself.

Solving stereotyped map problems, particularly those which depict definite situations in meticulous detail, is only slight preparation for the mental ordeals of war. The map problem has its place, an important place, in military instruction, but by itself it is inadequate. Academic knowledge and a stored-up accumulation of facts are not sufficient on the battlefield. The leader must know when to act as well as what to do under certain well-defined conditions. Above all he must be willing to accept responsibility for positive action in blind situations. To develop these qualities to the full, map problems should be supplemented by exercises with troops under conditions more closely approximating those of actual combat.

EXAMPLE I

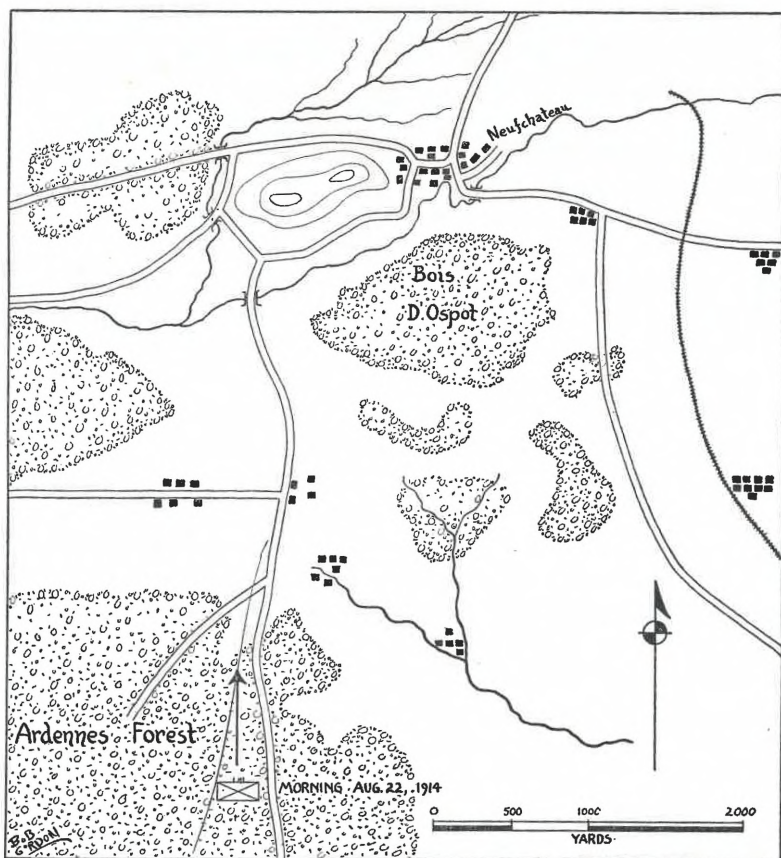
On the morning of August 22, 1914, the 5th French Colonial Brigade, with an attached battalion of field artillery, marched north through the Ardennes Forest with the destination of Neufchateau.

Other French columns marched north on each of its flanks. Although but a few miles separated these columns there was little or no communication between them, owing to the wooded terrain.

The advance guard of the 5th Brigade consisted of a regiment of infantry, less one battalion. Orders directed that the enemy be attacked if met. Although hostile cavalry patrols had been encountered, no strong enemy force was believed near.

Shortly before noon the brigade neared Neufchateau. Billeting parties moved ahead of the main body to enter the town.

Suddenly the advance party darted up the hill west of Neufcha-



Example 1

teau and began firing to the north and west. The point was heard firing near Neufchateau. A company of the support, which was then nearing the bridge west of the Bois D'Ospot, turned to the right and moved rapidly into the wood. At this time the head of the main body was near the edge of the forest.

The support of the advance guard moved up the hill west of Neufchateau. It was now discovered that the first firing had been directed at a long train of vehicles moving west on the road from Neufchateau and on a squadron of hostile cavalry halted in close formation near the tail of the train. An enemy force, strength un-

determined, was now seen approaching Neufchateau from the east. The reserve of the advance guard immediately attacked to the northeast into the Bois D'Ospot.

The brigade commander promptly directed his main body to assemble near the north edge of the forest and ordered his artillery into positions from which it could assist the advance guard, cover the deployment of the main body and support the attack.

This decision was made a few minutes after contact had been gained and before any but the vaguest information had been received. The attack of the advance guard was made entirely on the initiative of its commander.

The support of the advance guard, on the hill west of Neufchateau, was now attacked in force from the east, the northeast, the north and the west. After severe fighting the Germans, attacking from the east, took the Bois D'Ospot and threw back the remnant of the reserve of the French advance guard to the southwest.

Even before all his troops had cleared the forest, the brigade commander issued an attack order. He had four battalions. Three would attack the Bois D'Ospot from the south and southeast. Their attack would be supported by artillery. The fourth battalion would remain in brigade reserve.

Just as these units moved out it became evident that the situation on the left was desperate. The force on the hill west of Neufchateau was fighting for its life. It was being enveloped from two sides. The brigade commander therefore diverted one battalion of the main body to meet this menace to his left and continued his planned attack with the remainder of his force.

The main attack encountered strong German forces from the east and the French enveloping movement was itself enveloped. The attack stopped. The two assault battalions now found themselves in a serious situation. Much stronger forces were holding them in front and striking them in flank. The Germans were employing a great deal of artillery. The French brigade commander committed his reserve to prevent the threatened envelopment of his right, passed to the defensive about 5:00 p.m. and held on the line of villages just north of the forest. The German attack was stopped.

From the account *Neufchateau*, by Lt. Col. Grasset, French Army.

DISCUSSION

During the period considered, the decisions of the French advance guard and brigade commanders met the actual situations. Indeed, they are much like approved solutions to a map problem in spite of the fact that they were based on little information.

What happened was this. The French brigade stumbled into the bulk of the German XVIII Reserve Corps which was marching across its front from east to west. Thereafter events moved rapidly.

The action taken by the advance guard was on the initiative of its commander. The brigade commander, however, promptly assembled his main body in order to launch a coördinated blow. Although the situation was vague he issued his attack order without delay. He put in all his artillery. He gave weight to his main effort.

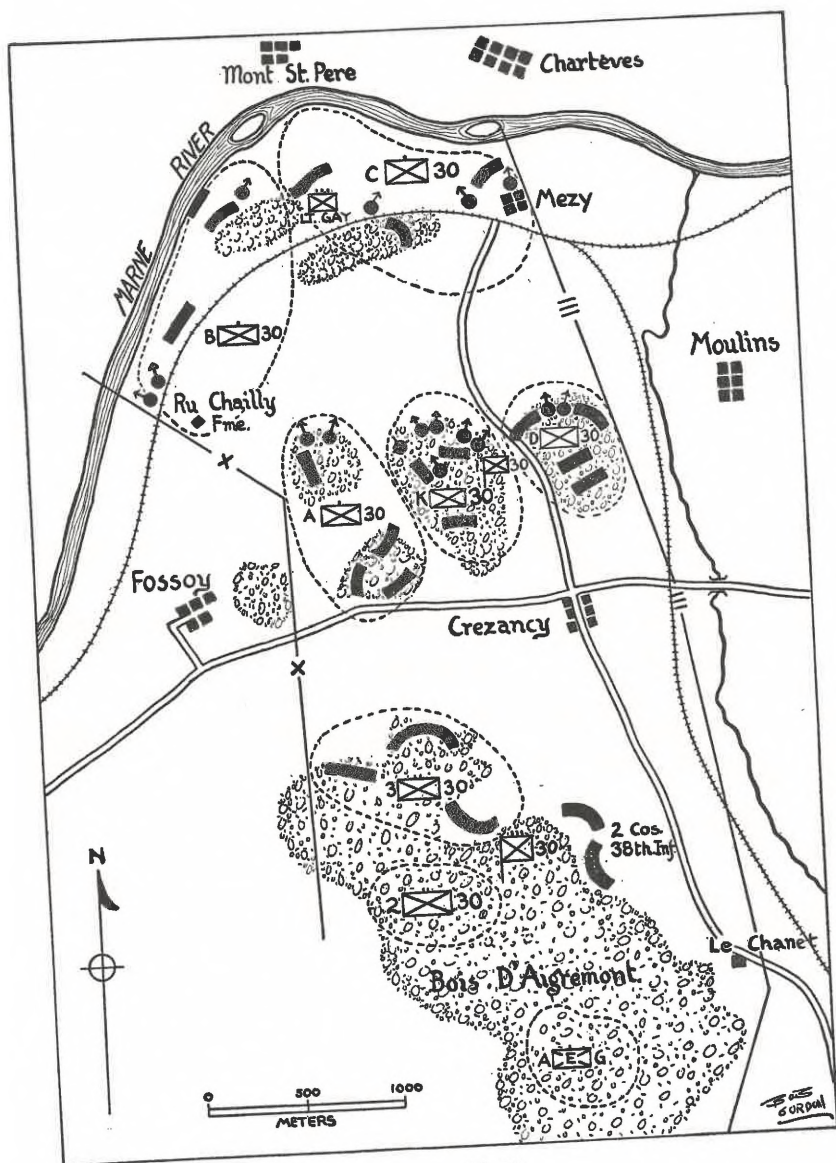
As his attack moved out, however, it became evident that the advance guard would be routed and captured before the attack could be made effective on the right. The brigadier therefore took the necessary action to cover the left flank, even at the expense of weakening his main blow. When the main attack was enveloped, the brigade reserve, which the commander had desired to employ for the decisive blow, was used to protect the right flank. The brigade then passed to the defensive and held.

The brigade commander did not wait for the ideal situation to develop. Instead he met the recurring crises of the action as they arose by dispositions that enabled him to meet events, even when the situation developed unfavorably and entirely at variance with what he had expected. As a result his brigade fought the bulk of an army corps to a standstill!

EXAMPLE II

On the morning of July 15, 1918, the 1st Battalion 30th U. S. Infantry held the forward area in the 30th Infantry sector south of the Marne. Two companies as outpost were disposed by platoons close to the river bank. The remainder of the battalion, with an attached rifle company and machine guns, held positions in some woods just north of the line: Fossoy-Crezancy.

A German bombardment began about midnight. No definite



Example II

information was obtained by the battalion or regimental commander for several hours. (See the description given in the previous study under the heading of "Obscurity.")

About 5:00 a.m. or shortly thereafter, the battalion commander made the following report and recommendations to the regimental commander:

The losses of the battalion have been very great.

Companies B and C (the outpost) are a total loss and survivors of these companies are stragglers.

Communication within the battalion is impossible.

Germans have crossed the river and are now on the south side of the Marne.

The enemy's rolling barrage has passed Companies A, K, and D, but the enemy does not appear to be following the barrage.

He then recommended that the artillery fire its SOS barrage (prepared concentrations within the American position to the south of the railroad line).

From the personal experience monograph of Major Fred L. Walker, who at the time these events occurred commanded the 1st Battalion 30th Infantry.

DISCUSSION

The regimental commander had to make a decision here. Should he, or should he not ask for this SOS barrage which could be put down promptly? Should he wait just a little longer before doing anything?

If he did not have it fired, he might miss the chance of bringing effective fire on the enemy and breaking up the attack. If he did have it fired, the barrage might be in the wrong place; it might hit American troops, or it might waste ammunition by falling behind the Germans.

The regimental commander did not know where his own front line was or where the Germans were. Should he wait a while? Should he make the decision at this time?

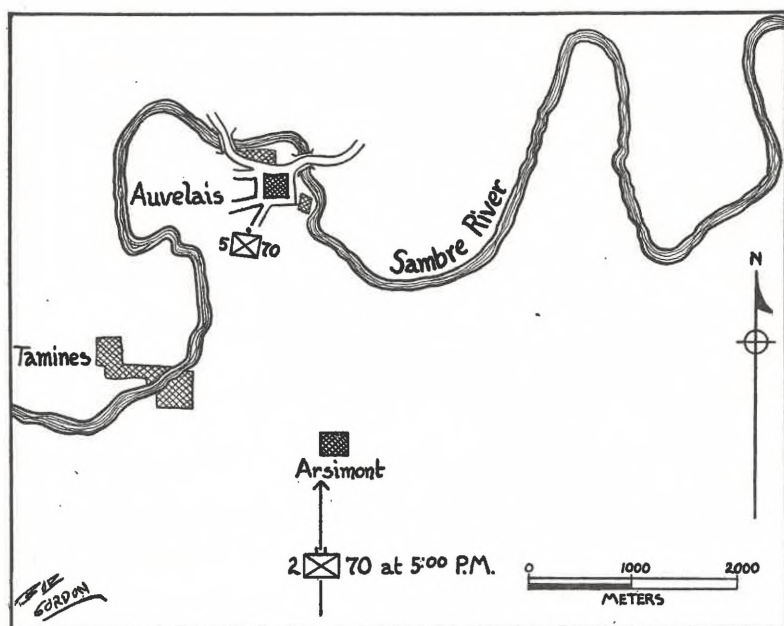
Again it was far from an ideal situation, but it was the present situation that had to be met. To the regimental commander it seemed clear that the Germans were somewhere south of the Marne. He accepted the report that B and C Companies were a loss. He noted the report of the battalion commander that the

German barrage had passed but that Germans were not following. Presumably they must be somewhere near the railroad. He asked for the barrage. It was fired. Although it did inflict casualties on at least two platoons of American troops who were still holding out on the river bank, it is reported to have been of effective assistance in stopping the German attack.

EXAMPLE III

The 70th French Infantry, part of the Fifth French Army, had marched north to meet the German enveloping movement through Belgium, and on August 20, 1914, was approaching the Sambre. The 70th Infantry was one of the leading French elements. On the afternoon of the 20th, it halted a few miles south of the Sambre.

About 5:00 p.m. the 2d Battalion was ordered to move two or three miles forward to Arsimont "to hold the bridges at Auvelais and Tamines." The battalion marched at once. En route the bat-



Example III

talion commander designated the 5th Company "to guard the bridge at the village of Auvelais."

The 5th Company arrived at Auvelais about 8:00 p.m. It was dark. The company commander had the following surprises:

1. Auvelais was not the village he expected, but a widely spread out town of some 10,000 inhabitants. His company, figuratively speaking, was lost in it.

2. There was not one bridge to guard, but eight, and these were scattered along some three miles in a bend of the Sambre.

3. The town extended to the north bank of the Sambre in a populous suburb. The company had been formally forbidden to cross the Sambre. All of Auvelais was extremely low and completely commanded by high ground on the north bank, ground which afforded good cover.

At 10:00 p.m. he received a telephone message, "You can expect to be attacked early tomorrow morning."

The captain got his battalion commander on the telephone. He explained the situation.

"The main bridge and the bend of the river at Auvelais are down in a hole. My company will be shot here like rats in a trap. I request authority to move to the north bank and organize the defense there."

"No, the order is strict not to go north of the Sambre."

"Well, then I request authority to organize the defense on the higher ground just south of Auvelais."

"No, the order is to guard the bridges, not to abandon them."

The company commander did get the promise of one more rifle company and with that he had to be content.

From the article by Captain Pots, French Army, on the engagement of the 19th Division, 21 August 1914, appearing in the *Revue D'Infanterie* for December, 1929.

DISCUSSION

Before seeing a German, this company commander had numerous unpleasant surprises. The situation differed completely from what he had expected. Never in all his training had this French officer been placed in anything even remotely resembling this situation and told to solve it.

Everything appeared illogical. There were numerous solutions

which readily suggested themselves to him. They were rejected by the battalion commander. Strict army orders prevented one solution from being adopted; the desire by higher authority to keep the bridges from being destroyed prevented another solution from being used.

The terrain was unfavorable and his force was far too small to effectively accomplish its mission. On the other hand, was it desirable to place strong forces in such a locality?

"Fighting the problem" was no use. He had to solve it. He made his dispositions, keeping the bulk of his force in reserve near the principal crossing.

Skirmishing began at 8:00 a.m., August 21, and developed into an attack. The French held the town until about 3:30 p.m.

EXAMPLE IV

On the night 8-9 October, 1918, the 117th U. S. Infantry of the 30th Division was near Premont. Late the afternoon of the 8th it was passed through by fresh troops who were reported to have advanced the line somewhat to the east of the town.

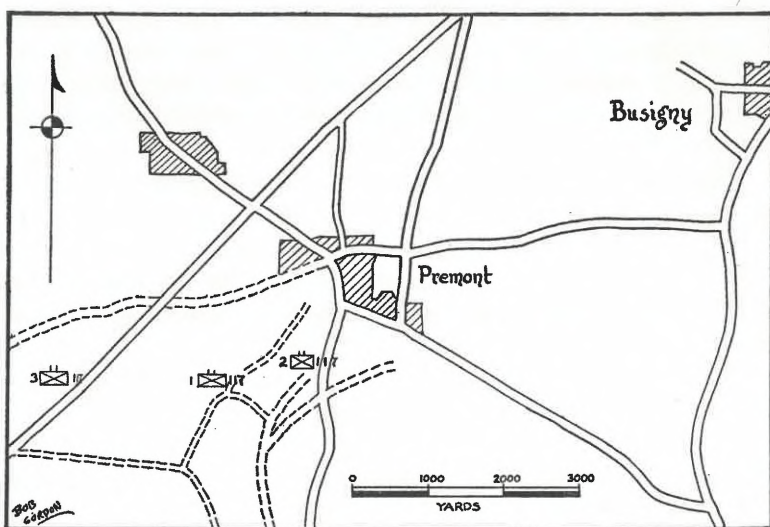
The 2d Battalion was a short distance southwest of the town, the 1st Battalion about 1,500 yards farther to the south and west, and the remainder of the regiment in reserve about 2,000 yards behind the 1st Battalion.

On the morning of October 9 the 117th Infantry was ordered to attack in the direction of Busigny. The regimental plan contemplated employing the 2d Battalion in assault, the 1st in support and the 3d in reserve.

The regiment received its instructions late. The battalions had not been warned and time did not permit the issue of a written attack order. It was therefore decided to give them their instructions by telephone.

When the attempt was made to telephone the order it was discovered that telephonic communication from the regiment to the 2d Battalion was out. The 1st and 2d Battalions, however, were still connected by wire, so it was arranged that the 1st Battalion should relay the order to the 2d.

Before the order to the 1st Battalion could be completed the wire failed. The hour of attack, the general plan, the general direction



Example IV

of attack, the objective and the boundaries, in part only, were received before the line went out.

On checking map coördinates, the 1st Battalion found that an error had been made in defining boundaries. The message was received at 3:40 a.m.; the attack was to start at 5:30 a.m.; the line of departure was believed to be some three miles away but its exact location was unknown.

Information of the enemy was lacking and no information was at hand as to the proposed activities of reserves and adjacent troops. The hour was growing late. It was obvious that much time would be lost in relaying the order to the 2d Battalion. It narrowed down to the question of whether or not the 2d Battalion could arrive in time.

The following steps were taken in the 1st Battalion:

At the first word that an advance was to be made, company commanders were ordered to report in person at battalion headquarters. This was done by the sergeant major while the message from regiment was still coming in.

At the same time the adjutant notified the 2d Battalion by phone that it was instructed to attack and that details would be sent as

soon as received. At this point wire connection with the regiment went out.

The battalion intelligence officer with his detachment was immediately dispatched to locate the line of departure, obtain as much information as possible and send back guides along the route of approach. This officer, who had heard the telephone conversation, had his detachment ready and moved out at once.

It was apparent that the 2d Battalion, although closer to the front, might be late. As the 1st Battalion had been enabled to start its preparations earlier, it was decided that it would also march to the front and would be in assault if it arrived first.

In other words, both battalions started forward, the one arriving first to be in assault, the other in support.

Both battalions arrived at the same time, each having two companies available and two companies far to the rear. Consequently the attack was made with battalions abreast, each battalion initially employing one company in assault and one in support. The barrage which had started was overtaken. The rear companies finally got up and the attack progressed successfully to the vicinity of Busigny.

As the result of a lucky guess, the attack seems to have been made in the proper zone.

From the personal experience monograph of Major C. W. Dyer, Infantry.

DISCUSSION

The situation confronting the 1st Battalion was abnormal and illogical. The troops should have been warned earlier. Orders should have been received sooner. At the very least the battalions should have been informed of the location of their line of departure and of their zone boundaries. The communications do not appear to have been well handled. Obviously there are many things to criticize.

By the terms of the order the 1st Battalion was in support. If the attack failed to jump off in time, it would not bear the onus. But this battalion does not appear to have spent any time dallying with the consoling thought that it was not responsible. The essential feature of the plan was that a battalion of the 117th Infantry attack at 5:20 a.m. from a vaguely-known location. Since it looked

as if the 2d Battalion might not be able to reach the jump-off line in time the battalion commander of the 1st decided to be prepared to pinch hit for it if necessary. What matter if it were the 1st Battalion or the 2d? Either battalion was equally capable of launching an attack.

Therefore, acting in harmony with the general plan, the 1st Battalion disregarded the attack order, agreed on a solution with the 2d Battalion and started on its way. A decision was taken that met the situation. Perhaps there were things to criticize in the decision. If events had gone seriously wrong the 1st Battalion commander might have been in a tough spot. If we sit down in the peace and quiet of a map problem room and meditate for an hour or two, perhaps we may reach a better solution. This battalion commander had to make a decision quickly. He did and as a result the 117th Infantry attacked with troops approximating one battalion, at approximately the right place and time.

EXAMPLE V

On April 7, 1916, during the Verdun offensive, the 1st Battalion 22d German Infantry Regiment attacked from the vicinity of Haucourt to capture a French strong point on a hill southeast of Haucourt.

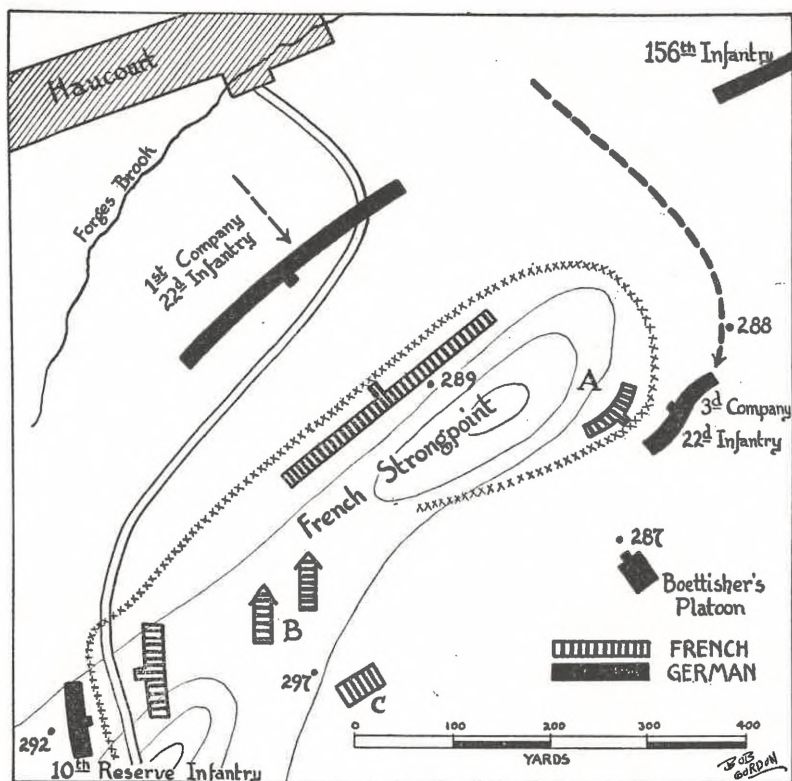
The 1st Company was to attack straight toward 289. The 3d Company was to attack toward 288, then wheel to the west, taking the strong point in rear. The 156th Infantry was to attack on the left of the 3d Company and the 10th Reserve Infantry Regiment was to attack on the right of the 1st Company.

The 3d Company overcame resistance near 288 and faced generally west on the line: 288-287, in order to take the French strong point in flank and rear. One platoon, commanded by Ensign Boetticher, was sent to 287 with the mission of protecting the flank of the 3d Company.

Upon arrival at 287 the following situation confronted the platoon leader:

Heavy firing was heard from the vicinity of 289. Evidently the 1st Company was hotly engaged.

The 3d Company was confronted by French at A, who seemed to be preparing for a counter-attack.



Example V.

Near 292 the 10th Reserve Regiment was engaged in a fight with the French and seemed to be making no progress.

Near B were French troops moving forward toward the French strongpoint. Near C a comparatively large number of French were resting in reserve. Boetticher's platoon had not been seen by the French.

The platoon moved to the southwest, attacked and surprised the French reserves near C where it captured a French colonel, two captains and 150 men. Reorganizing rapidly, the platoon then attacked the French opposing the 10th Regiment near 292. The attack was successful and several hundred additional prisoners were taken.

From an article, page 241, in *Kriegskunst in Worte und Bild* in 1931.

DISCUSSION

Here we have an example of a security detachment which accomplished its mission and more by means of an attack.

The leader reasoned that the French moving forward near B could be dealt with by the 1st Company, since the French direction of advance was such that they would meet the 1st Company frontally.

He considered the advisability of aiding the 3d Company by firing on the enemy at A, but this would leave the company still exposed to the danger of being attacked in rear by the French reserves at C. It was these reserves which constituted the chief threat. If they were dispersed, the whole problem would be solved.

Ensign Boetticher's estimate of the situation was correct and his prompt action met with spectacular success.

CONCLUSION

Decisions will have to be made regardless of the fact that the situation may be vague, abnormal or illogical. Each event that occurs, each bit of information received, will cause the leader to ask himself, "Shall I continue with my present plan and dispositions, or is it now necessary for me to give a new order?" Whatever the answer to this question, it involves a decision on the part of the commander.

For example, a company commander, in a vague situation, ordered to attack in a certain direction, must carefully time his decision in regard to deployment. Premature deployment may lead to loss of direction, loss of control, and a piecemeal effort. Waiting too long may result in his company being forced to deploy under enemy fire, in surprise and confusion, and with heavy losses.

Even if information be lacking the leader must produce decisions. In most cases a poor decision will be better than no decision at all.

Negligence and hesitation are more serious faults than errors in choice of means.

No rule can tell us how to time decisions correctly. All we can say is that the decision must be made early enough for action based upon it to be effective. On the other hand, it must not be taken prematurely, lest it fail to meet a changing situation.

How can we learn to make decisions that meet the existing situa-

tion? Usually our map problems state a definite situation and then conclude "It is now 10:00 a.m. Required: decision of Captain A at this time." Possibly Captain A would have made a decision before this time. Perhaps he would wait for more information or for a more ideal situation to develop. At any rate, one of the most difficult elements of his decision, i.e., when to make it, has been made for him.

Some problems and exercises in which the principal element is the time at which decisions are made should be included in peace time instruction. By such means the natural tendency to temporize in obscure situations may be counteracted and the leaders trained to take timely action.

In war, situations will frequently arise which are not covered by express orders of superiors. Perhaps the situation will appear entirely different from that which higher authority seemed to have in mind when it issued orders to the subordinates. The subordinate may feel that literal compliance with orders received would be disastrous. In such cases he must act in accordance with the general plan. He must take the responsibility and make a decision.

Marshal Foch said: "There is no studying on the battlefield. It is then simply a case of doing what is possible, to make use of what one knows, and, in order to make a little possible, one must know much."

CHAPTER IX: OPTIMISM AND TENACITY

Optimism and tenacity are essential attributes of battle leadership.

BATTLE impressions tend to weaken the will of a commander. Casualties, confusion, reported failure, exaggerated stories of actual conditions, all batter at the rampart of his determination. He must consciously resist these onslaughts; he must deliberately take an optimistic view. Otherwise he, and his unit with him, will bog down in a mire of discouragement and despair.

Tenacity demands relentless pursuit of the end to be gained. Only a higher commander can relieve a subordinate of the responsibility of expending the full power of the force at his disposal in the effort to achieve victory.

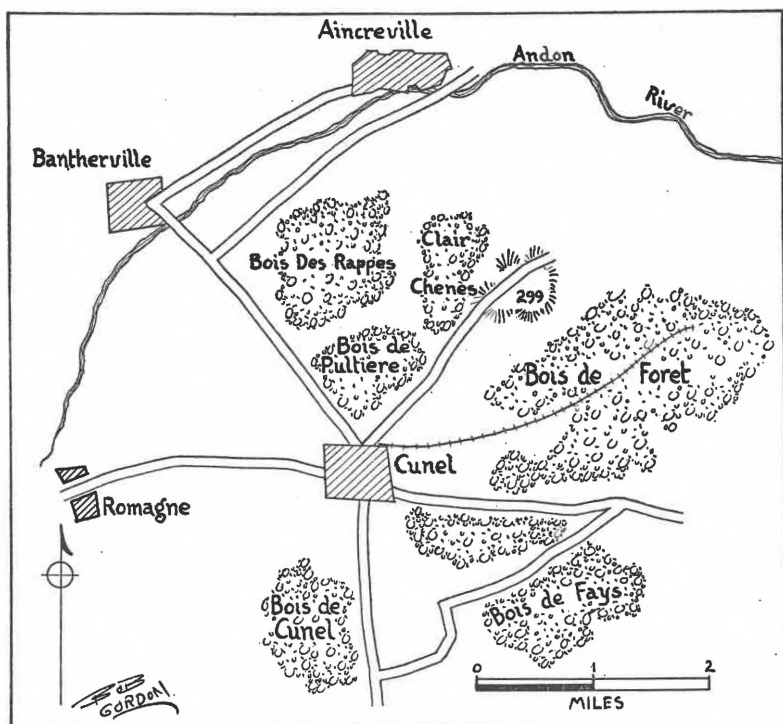
Tenacity does not necessarily mean dogged persistence in a given course of action. A change of methods may be desirable. In the language of Marshal Foch, the will must be powerful without being pig-headed and stupid; it must have suppleness and the spirit of adaptation.

In other words the will must be strong, but not headstrong.

EXAMPLE I

At 8:00 a.m. on October 15, 1918, the 61st U. S. Infantry, which had suffered heavily in previous fighting, attacked in column of battalions with the Bois des Rappes as its objective.

About 9:00 a.m. the 1st Battalion, in assault, reached the northwestern edge of the Bois de Pultiere. Both flanks of this unit being exposed, the 3rd Battalion, which had been in support, was moved to the right and abreast of the 1st. The capture of the Bois des Rappes, which was the real task, still lay ahead. About noon, after desperate fighting, Companies A, C, and D gained their final objective—the northwestern edge of the Bois des Rappes—and began to reorganize. Although victorious, this battalion had been literally shot to pieces. Confusion reigned. Companies A, C,



Examples I and II

and D together could muster no more than 75 men. Company B could not be located. Noncommissioned officers in command of companies struggled to effect a reorganization while American artillery blindly dropped shells on the remnant of this shattered battalion.

On the right, the 3d Battalion, having become disorganized following the loss of its leader and three company commanders, was passed through by the 2d Battalion.

Liaison between assault elements and the regimental command post failed. No information reached the regimental commander throughout the forenoon save from the wounded. These stated that although the Bois des Rappes had been entered, the attack had been stopped and that artillery support was necessary to break the hostile resistance.

About this time a staff officer of the 3d Battalion, completely unnerved by the terrific casualties, arrived at the regimental C.P. in a state bordering on collapse. He gave the colonel what appeared to be the first authentic information. He reported that his battalion commander and three company commanders were casualties, that the battalion itself had been practically annihilated, and that the few survivors were retreating in confusion.

Without verifying this disheartening news, the colonel immediately went to the brigade command post and repeated it. Although the impression created by his report was to the effect that the entire 61st Infantry was retreating in disorder, the brigade commander none-the-less directed that the troops be reorganized and pushed back to the north edge of the Bois des Rappes.

By this time, however, rumors of disaster had reached the division commander, who promptly countermanded the order of his brigadier, directed that no further advance be made into the Bois des Rappes that day, and ordered the brigade to organize its front line on the northern edge of the Bois des Pultiere.

Pursuant to this order the 1st and 2d Battalions withdrew, thus abandoning positions which had been won at great sacrifice. Some days later the Bois des Rappes was retaken at the cost of many lives.

From the personal experience monograph of Captain Merritt E. Olmstead, Infantry.

DISCUSSION

This example strikingly illustrates the error into which commanders may fall if they base their estimate of the situation upon the reports of wounded and shaken men who filter to the rear. Such men are naturally discouraged. Frequently they come from a point where things are going badly and they assume that the same conditions exist everywhere. Moreover they are prone to justify their own action in abandoning the fight by painting a dismal picture of disaster.

In this example a great contrast existed between the actual situation and that which was reported to higher commanders. The division and brigade commanders believed that the entire 61st Infantry was a broken and beaten unit, retreating in confusion.

Actually, the 1st Battalion was on its final objective, battered and disorganized—but victorious, and the comparatively fresh 2d Battalion had passed through the 3d in order to continue the attack. Unquestionably the 3d Battalion was in a state of great confusion and undoubtedly some of its men were retiring, but even if the entire battalion had been withdrawing it would not have compromised the situation, for it had been passed through and was no longer in assault. No crisis existed that would have precluded its reassembly and reorganization.

True, the situation had its unfavorable aspects, but the fact remains that success was at hand. Some of the higher commanders, however, could see only the black side of the picture.

There are three points in this illustration worthy of categorical emphasis. First, a subordinate should not add to the troubles of his superior by indulging in unduly pessimistic reports. The situation as known should be accurately and exactly reported without any pessimistic assumptions or imaginings.

Second, when discouraging information is received, particularly if it comes from wounded men or stragglers, it should be materially discounted. In no case should it be taken at its face value without corroboration.

Third, it may always be safely assumed that the enemy is also in difficulty. We now know that, in this engagement, the Germans were in great disorder and confusion. The fact that the depleted 1st Battalion held its position all day, not withdrawing until nightfall, was, in itself, indicative of the fact that the enemy had been fought to a standstill.

Pessimistic reports should be investigated before being acted upon.

Information from wounded men is usually exaggerated.

Often the enemy has been hit harder than we realize and always has difficulties of which we are ignorant.

EXAMPLE II

At 7:00 a.m. on October 20, 1918, troops of the 3d U. S. Division attacked the Clair Chenes Wood. Their division had been in the front line for approximately three weeks and during this period had sustained terrific casualties. The troops had reached a

point verging on exhaustion. Although their repeated attacks had met with some slight success they had won no striking victory.

The attacking force on October 20 comprised the 1st and 3d Battalions 7th Infantry (which were consolidated and organized as a provisional company containing 301 men), two companies of the 6th Engineers, and one company of the 4th Infantry. The attack penetrated Clair Chenes Wood and, at about 8:15 a.m., the advance elements reported that they had reached the northern edge of the wood. These leading troops were few in number and were not closely followed by supporting units. Taking advantage of this fact, those Germans who remained in the wood infiltrated around the flanks and through the front line of the American position. A confused and obscure situation resulted. After hard fighting some of the Americans of the support units began to withdraw.

The attack, to all appearances, had failed and reports to that effect reached the commanding officer of the 7th Infantry. Assembling all available men in the vicinity, 150 all told, and personally taking command of this nondescript detachment, he counterattacked into Clair Chenes Wood. Despite severe losses from machine guns and minenwerfers, this party gained the northern edge of the wood and joined the few remaining men of the advanced elements. Three German officers and 112 men were taken prisoners and Clair Chenes Wood passed definitely and finally into American hands.

The next day this aggressive officer was placed in command of an operation directed against Hill 299. At noon the depleted 7th Infantry, Company E, 4th Infantry, one battalion 38th Infantry, three companies of the 6th Engineers, and a few machine guns—all that was available of the spent 3d Division—moved to the attack.

The disputed hill fell, but almost coincident with the moment of success—when all available infantry had been committed to the action—word was received that the enemy, driving from the northeastern edge of the Bois des Rappes, were attacking Clair Chenes.

Some of the troops holding this hard won wood withdrew. Streaming back to the 7th Infantry Command Post in the north-

ern edge of the Bois de Pultiere, they reported that the Germans were attacking in force and that the line had been broken.

All available troops having been committed, the commanding officer, 7th Infantry, with three members of his staff and sixteen runners and signalmen, moved forward at once, picking up a few stragglers as he advanced. "Come on, now, we're going back to the front," he called. "We're going to get the old line back again."

The little party continued its advance under shell fire until it reached the point where the attack was reported. Here it captured a small German patrol but found no evidence of the strong hostile attack that had been reported.

From the History of the Third Division.

DISCUSSION

The commanding officer of the 7th Infantry displayed marked resolution in the operations on these two days. On the first day, after a brief initial success, the bulk of his force failed. The attack had become disorganized. Men were moving to the rear individually. A commander lacking in tenacity would, in all probability, have contented himself by sending back a report of failure supported by sundry and assorted reasons. But this leader, gathered a small detachment, made one last effort, and succeeded.

At the crisis of the operation on the second day the situation again seemed desperate. Men were streaming to the rear. A strong German attack was reported to be striking toward the flank of the 7th Infantry. There were no troops to meet it. Again rising to the emergency, this same energetic officer, with his staff and a handful of runners, moved forward to the threatened locality. There the situation was found to be far less critical than it had been painted. The few men with the colonel were sufficient to restore it. The point is this: had not some troops moved forward, had not this leader imparted his own courage and optimism to the men, the position might well have been lost.

This example portrays a commendable reaction to pessimistic reports. The commanding officer did not accept them blindly and send back word of defeat and disaster; neither did he ignore them. Instead, he investigated at the head of a small improvised

force and in each instance this proved sufficient to restore the situation.

A flustered commander will mean an excited panic-ripe command. The attitude of an optimistic and tenacious leader will be reflected in the attitude of his men.

EXAMPLE III

On October 2, 1918, elements of the 77th U. S. Division attacked northward in the Argonne Forest. A force under the command of Major Charles W. Whittlesey, consisting of headquarters scouts and runners of the 1st and 2d Battalions 308th Infantry, Companies A, B, C, E, G and H of the 308th Infantry, two platoons of Companies C and D, 306th Machine-Gun Battalion and Company K, 307th Infantry, reached its objective east of the Moulin de Charlevaux. Company K 307th Infantry joined the force after it reached the objective.

The force had been about 700 strong when it began its advance. Adjacent and supporting American units had not met with success. Germans infiltrated behind this force and communication was cut between it and the Americans in the rear. This force, known to history as the "Lost Battalion," having only one day's ration for four companies, was cut off and surrounded.

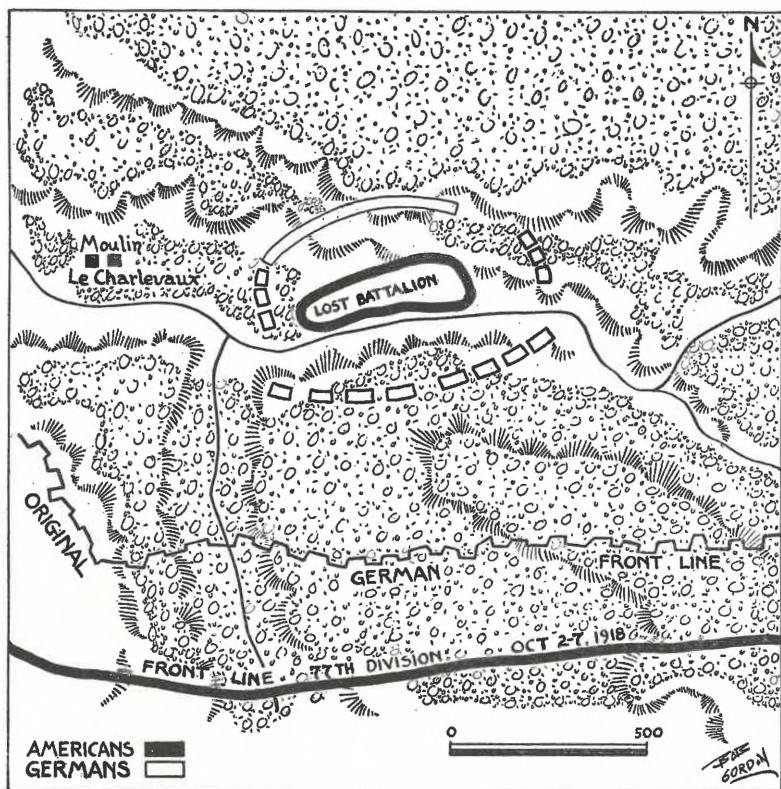
Upon reaching its objective, the force had organized for defense. Enemy artillery shelled the position. This ceased after a time and trench-mortar fire followed. An attempt to establish contact with the rear failing, the situation was reported by pigeon message and the force was disposed for all around defense.

The following message was then communicated to all company and detachment commanders:

"Our mission is to hold this position at all cost. Have this understood by every man in the command."

Enemy machine gun and trench-mortar fire continued. About 3:00 p.m. the next day, October 3, a German attack was launched from the front, supported by fire from the flanks and rear. The leading assailants got close enough to throw grenades, but the attack failed. About 5:00 p.m., another attack came from both flanks. This too was repulsed but with heavy American losses.

No medical officer had accompanied the force although three



Example III

enlisted men of the Medical Corps were present. Their supply of dressings and all first aid bandages were used that night.

Daylight of October 4 found the men tired and hungry. All, especially the wounded, had suffered bitterly from the cold during the night. More enemy trench-mortars went into position and opened a steady fire, causing heavy casualties. Scouts reported that the Germans were all around the position in large numbers. No word from the rear had been received. Again the situation was reported by pigeon message.

During the afternoon of the 4th an American barrage, starting in the south, swept forward and settled down on the position, causing more losses. German trench-mortars added their shells. At

this time the last pigeon was released with a message giving the location of the force and stating that American artillery was placing a barrage on it.

American planes flew over the position and were fired on by the Germans. About 5:00 p.m. a new German attack was repulsed. Water was being obtained from a muddy stream along the ravine below the position. Often a canteen of water cost a casualty, for the enemy had laid guns to fire day and night on parties going for water. As a result, guards were placed to keep men from going to the stream during daylight. A chilly rain the night of the 4th added to the discomfort.

About 9:00 p.m. a German surprise attack failed. The wounded were now in terrible condition, and, like the rest of the force, were without food.

Indications of attacks by Americans from the south had been noted, but no relief came. Although the force did not know it, several battalions of the 77th Division had been reduced to almost negligible strength in vain efforts to reach the "Lost Battalion."

During the afternoon of October 5 heavy French artillery fire from the southwest fell on the position. The Germans waited and as the French fire lifted, another German attack was launched. The Americans' fire stopped this attack likewise.

Shortly after this, American airplanes dropped packages near by but they fell in the German lines. The men realized that this was an attempt to get food to them.

Bandages were taken from the dead and applied to the wounded. Spiral puttees were used as bandages. It became increasingly difficult to get water.

On the morning of October 6 hostile rifle and machine gun fire started early and the trench mortars again took up their pounding. Another American airplane came over and dropped packages, but again they fell in the German lines. Soon afterward there were signs that Germans were forming for another attack. This, however, was broken up by American artillery fire.

During the afternoon of October 6 an intense German machine gun barrage was laid down, thoroughly covering the position, and causing many casualties. It was immediately followed by an attack which was repulsed, but the usual toll of dead and wounded

was incurred. Ammunition among the Americans was running low. But despite everything, the courage and morale of the force remained high. The men were determined to fight to a finish.

About noon on the 7th another attack was repulsed. At 4:00 p.m. enemy firing ceased. From the left flank an American soldier appeared limping toward the position. He carried a long stick on which was tied a white piece of cloth. This soldier had been captured by Germans while attempting to obtain a package of food dropped by the airplanes. He brought a letter from the German commander, neatly typewritten in English.

"Sir, the bearer of this present, Private———, has been taken prisoner by us. He refused to give the German intelligence officer any answer to his questions, and is quite an honorable fellow, doing honor to his Fatherland in the strictest sense of the word.

"He has been charged, against his will, believing he is doing wrong to his country, to carry forward this present letter to the officer in charge of the battalion of the 77th Division, with the purpose to recommend this commander to surrender with his forces, as it would be quite useless to resist any more, in view of the present conditions.

"The suffering of your wounded men can be heard over here in the German lines, and we are appealing to your humane sentiments to stop. A white flag shown by one of your men will tell us that you agree with these conditions. Please treat Private——— as an honorable man. He is quite a soldier. We envy you."

Major Whittlesey made no reply, oral or written. He ordered two white airplane panels which were being displayed to be taken in at once. Nothing white was to show on the hillside.

The fiercest attack of the siege followed. Wounded men dragged themselves to the firing line, and those who could not fire, loaded rifles. The enemy used flame throwers in this attack, and nearly took the position, but finally was repulsed.

At dusk on the 7th it seemed impossible for the force to hold out. Only two machine guns of the original nine remained. No gunners remained to man them. Ammunition was almost exhausted. The next attack must be met with the bayonet alone. There had been no food since the morning of October 3. The

water obtained was slimy and bad. Still the force was willing to fight on.

That night the enemy withdrew and American troops arrived soon afterward. One hundred and ninety-four men were able to walk out of the position. Many of these were wounded.

Despite the desperate situation and the hardships, the morale of the force had not been broken. Inspired by their leader, the men were determined to fight to a finish.

From the personal experience monograph of Captain Nelson M. Holderman, Infantry, who at the time commanded Company K 307th Infantry.

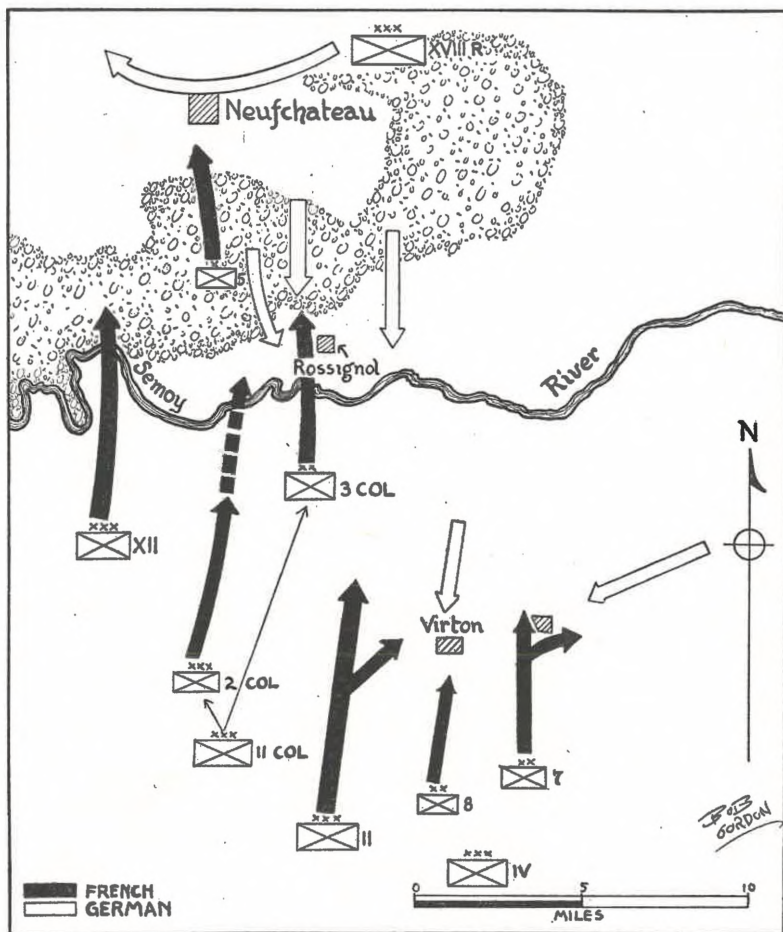
EXAMPLE IV

On the afternoon of August 22, 1914, the French were engaged against the Germans in the Belgian Ardennes. It had been a meeting engagement, or rather several meeting engagements, division against division, corps against corps, without much connection between the various combats.

Late in the afternoon, five separate French commanders made pessimistic decisions based on reports of what had happened to troops other than their own. In each case, the actual situation and action taken by the Germans did not correspond to the fears of the French commanders. In each case the French decisions hurt the French. They occurred in five adjacent columns, each decision being a separate one, and each made at approximately the same hour.

The commander of the 7th French Division at Éthe, finding his division cut in two, and fearing that he was about to be double-enveloped, withdrew the rear portion of his division, leaving the forward part to its fate. The forward half, although engaged against superior numbers, fought so well that the Germans withdrew at dark.

On the left of the 7th French Division was the 8th. This unit had been surprised early that morning in the fog near Virton. Confused fighting followed. The Corps commander, who had a mission of protecting the flank of the unit on his left, which was farther advanced, suddenly decided that he could do this very well from a position in rear. He ordered a withdrawal. The troops, however, were engaged and a large part of them did not get the order. At dusk these, assisted by troops of an adjacent division, instead of



Example IV

withdrawing, attacked and captured the German front line. No exploitation was possible because of previous decision of the corps commander and that of the 7th Division commander.

pose it, had it been launched. The Germans seen on the flank were a few stragglers who had apparently become lost in the confusion of battle.

Going to the left, we find the 3d French Colonial Division, late that afternoon, cut in two; half of it north of the unfordable Semoy, half of it south. The forward portion at Rossignol was being double-enveloped by superior German forces. However, the 2d Division of the Colonial Corps had just arrived; its leading elements had crossed the Semoy, it was in position to take one of the German pincers in flank and rear. So far the Germans here had been superior in numbers. Now the French were about to have this superiority. At the crucial moment, the corps commander, because of pessimistic reports from units on his flanks (including the 5th Colonial Brigade, his left column), decided to halt the attack, and adopt a defensive attitude. The result was that instead of a possible French victory, or at least a draw, that half of the 3d Colonial Division at Rossignol was destroyed.

Let us see what had happened to the 5th Colonial Brigade. It had struck head-on into the flank of the XVIII German Reserve Army Corps at Neufchateau. Although it had been terribly hammered and driven back, it had fought so hard that by 5:00 p.m. the German attack had been stopped, and the enemy had decided to quit for the night. The Germans thought they were facing a division or possibly an army corps. Nevertheless, the French brigade commander sent back word that he was withdrawing after a hard fight. This caused the French corps commander to suspend his attack near Rossignol. The 5th Brigade, however, seems to have had a temporary change of heart. Its withdrawal was made later, and largely as a result of reports that the XII Corps on its left had been engaged and that elements were withdrawing.

As a matter of fact, the XII Corps had met little opposition and at the time was even considering launching a pursuit. During the night it withdrew due to the situation of units on its flanks.

From the accounts of Ethe, Virton and Neufchateau, by Lieutenant Colonel Grasset, French Army; the *Genesis of Neufchateau* by Major Pugens, French Army; and French Official documents.

CONCLUSION

In the case of the "Lost Battalion" we see a marvelous record of endurance, a soldierly acceptance of conditions, and a determination to accomplish its mission. Of the examples quoted, this is the only one in which rumors of disaster, exaggerated stories and reports, do not figure. Had the battalion commander and his subordinate leaders weakened a moment, this attitude would have been transmitted to the men: instead we have an inspiring record of fortitude and tenacity.

The other examples show the action of leaders when confronted with pessimistic reports. Where such reports were accepted at full value, the result was frequently disaster.

Consider the battles of Magdhaba, December 23, 1916, and Rafa, January 9, 1917, in which the British defeated the Turks. In each case the British commander made the decision to break off the fight. In each case before the order could reach the front line the victory was won.

At Magdhaba it appears that a large portion of the credit should go to General Cox, who commanded the 1st Australian Light Horse. He received the order to retire:

"Take that damned thing away and let me see it for the first time in half an hour" said General Cox to a staff officer. Half an hour later victory was assured.

Scharnhorst, when consulted in regard to the appointment of Blucher to high command in the Prussian Army, asked, "Is it not the manner in which the leaders carry out the task of command, of impressing their resolution in the hearts of others that makes them warriors, far more than all other aptitudes or faculties which theory may expect of them?"

When a superior receives pessimistic reports, he should check up, but not check out.

A chin is just as essential as a brain to a military leader.

CHAPTER X: ORDERS

The order must clearly express the will of the leader and must fit the situation. Usually it should be brief and simple.

CLEARNESS and promptness of issue of orders are of far more importance than correctness of form. The amount of detail in orders will vary. With little time, no good maps, and with well-trained troops, orders will tend to be general. Especially should details be eliminated when the time is short and changes in the situation are probable before the order can be executed. With plenty of time, excellent maps, and troops lacking experience, more details may be advisable.

A complex situation should be met by a simple order.

The following examples are from the experience of French, German and American troops in the World War.

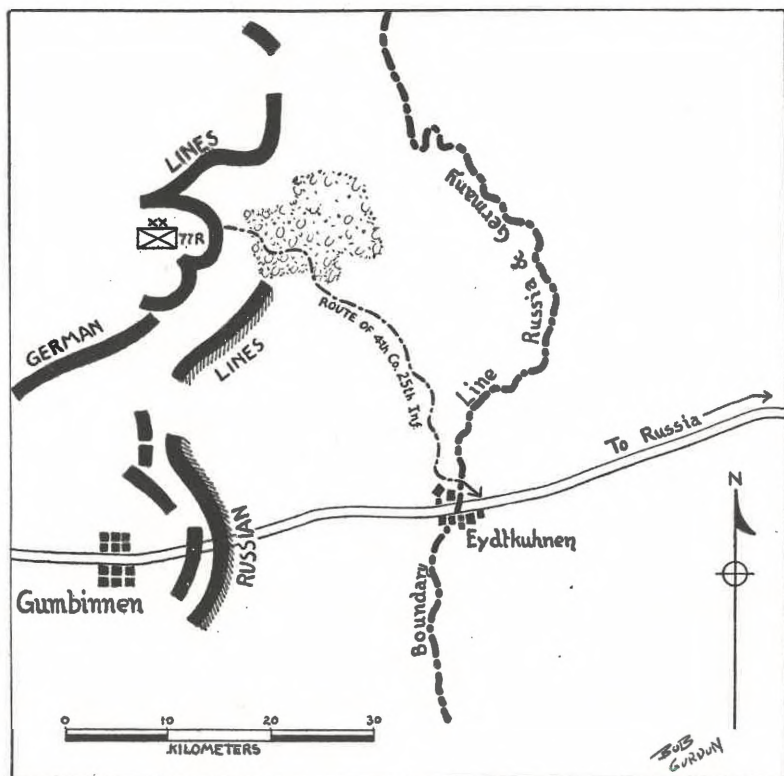
EXAMPLE I

The 4th Company, 256th German Reserve Infantry Regiment, part of the 77th Reserve Division, took part in an attack against the Russians early in 1915.

The troops, although the bulk of the men had no war experience, contained noncommissioned officers and privates who had been in battle. In every squad there were one or two men who had been to the front. The officers were veterans.

The march to the front was long and difficult—in the cold and snow—but the fact that General von Hindenburg was in command of the operation instilled great confidence in all ranks. The Germans attacked at dawn. The Russians were surprised and defeated and the Germans took up the pursuit.

The battalion of which the 4th Company was a part found virtually no enemy in its front. Occasionally it met a few Russians whose opposition was quickly broken. The battalion marched all day and all night, first toward the east, through the thick forest, later toward the south. There was no firing but it was cold and



Example I

the snow was deep. The troops were marching on a good road, but the men who marched at the head of the column and broke the path through the snow became so tired that they had to be relieved every half hour. Although marching was difficult and the pack heavy, the morale was good. Men and officers properly estimated the situation in believing that the march was long in order to enable them to encircle the Russians. They felt that it was to be another Tannenberg.

Toward morning the weary column approached the town of Eydtkuhnen. The men were rejoicing over the fine billets there, when suddenly the column bent away from the main road and again moved east.

Some of the young recruits began to growl. But the old soldiers said: "Shut up, you dumb recruits, are you cleverer than Hindenburg? If I am satisfied, you also ought to be. We were making marches when you were still at home at your mother's apron strings."

Morning came but the troops marched on. It was foggy and visibility was limited to 100 yards and less. Suddenly the column halted. Company commanders were assembled. The battalion commander gave the following oral order:

"About two kilometers in front of us is the main road from Eydtkuhnen to Russia. It is possible that we will find enemy on that road trying to escape to the east.

"The battalion advances deployed toward that road and gains possession of it, the 3d and 4th Companies in front, on both sides of this road on which we are now marching. The 1st and 2d Companies follow 500 meters in rear on this road.

"I will be at the head of the 1st Company."

The leading companies moved out with one platoon in front and two in reserve. Each leading platoon sent forward two pairs of scouts. Almost before the advance got well started one of the scouts came running back with the report:

"Three hundred meters in front of us is the road. Russians are marching on it toward the east."

At the same moment the battalion commander came forward on his horse. He merely ordered:

"Attack at once."

The battalion continued its advance and suddenly burst upon the highway jammed with trains and artillery. There was a shout, a few shots, a rush, and the Germans were on the highway in the midst of the Russian transport. The Russians were completely surprised; all but a few who escaped in the fog were captured, with all their guns and vehicles.

From an address delivered at The Infantry School by Captain Adolf von Schell, German Army, who commanded the 4th Company 256th Reserve Infantry Regiment in this action.

DISCUSSION

We note the brevity and simplicity of the order of the battalion commander as he approached the road from Eydtkuhnen to Russia.

The order met the situation. It met it so well that when the enemy was discovered, all the battalion commander had to say was "Attack at once." The order was timely; it reached subordinates so that they had time to make their dispositions. The battalion commander did not refer to road junctions and points on the map; he spoke in terms of the ground which the troops could see.

The order did not go too far into the future, nor did it prescribe what would be done if various situations were encountered. It did place the troops in such a formation *that no matter what situation arose it could be met.*

Captain von Schell comments on the order: "Please notice that the order included no information of the enemy. We had no information of the enemy. But on approaching the road, a decision nevertheless had to be made, not because we had met the enemy, but because it was time to give an order. The general situation demanded it."

EXAMPLE II

The 28th U. S. Infantry, part of the 1st Division, attacked near Cantigny on May 28, 1918. The troops had been confronting the Germans in that vicinity for several weeks. The operation was planned long in advance. Good maps were available. The troops, while they had had experience in holding a defensive sector, had not attacked before. It was considered extremely important for purposes of morale for the first American attack to be successful.

The 1st Division issued a very long and detailed order. The division order left little to the initiative of subordinate commanders. The attack was rehearsed on terrain in rear which resembled that near Cantigny. Every little minute detail was covered in the preliminary arrangements.

The attack was successful.

From the personal experience monograph of Captain George E. Butler, Infantry.

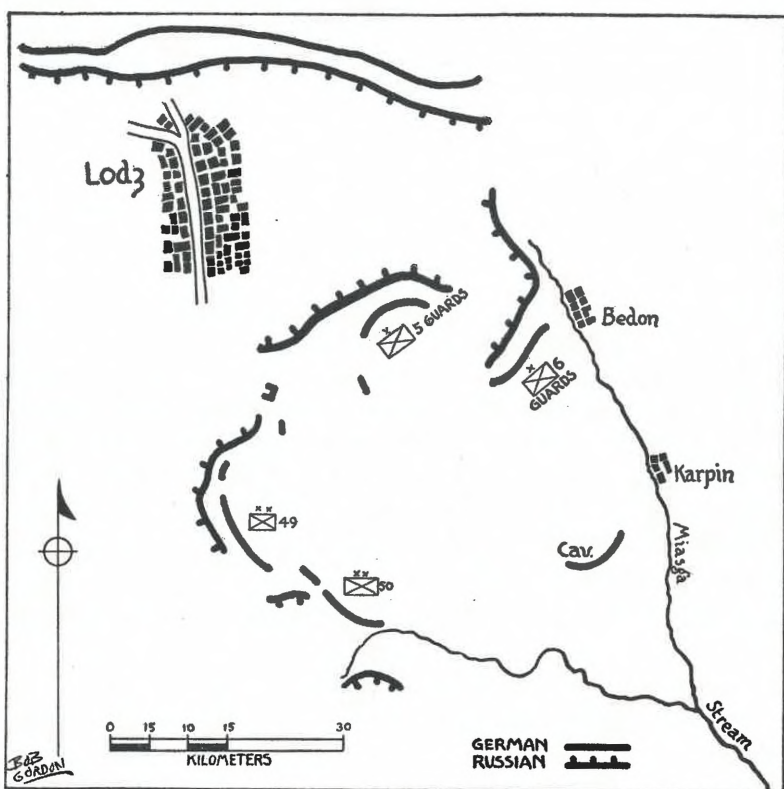
DISCUSSION

The order for the Cantigny attack is a marked example of the extent to which minute details may be prescribed in preliminary arrangements for combat. It illustrates the maximum authority which a commander can exercise over a subordinate in handling a

unit in combat. In war of movement, such an order would be wholly impracticable, but it was well suited to the special conditions which prevailed at Cantigny. The troops were inexperienced; the objective was strictly limited; there were good maps; there was plenty of time. Therefore the higher commander, having much at stake, exercised the maximum of authority and regulated even minor details.

EXAMPLE III

On November 22, 1914, a German force, consisting of a reinforced corps, was attacking westward and northwestward toward Lodz. It had, with other German troops, approached Lodz from



Example III

the north, and was making an envelopment. However, the attack had been checked, communication with other German forces severed, and superior Russian forces seemed to be approaching from all sides.

The position of the German force was generally as indicated on the sketch. The 3d Guard Division (5th and 6th Guard Brigades) faced north; elements of the 49th Reserve Division faced generally west and elements of the 50th Reserve Division faced south and southwest. Units were depleted, exhausted and intermingled. The effective strength of the divisions was not over two or three thousand men each.

The decision of the commander of the German enveloping force was to withdraw to the east of the Miasga stream, and then strike north.

The written orders directed the 3d Guard Division to remain in position until midnight, and then move to the east of the Miasga between Bedon and Karpin. In addition, the order directed the division to send immediately "a flank security detachment to the south of Bedon."

From oral and telephonic messages received, the Guard Division understood that its mission was to secure the "right flank" of the corps.

Five battalions of the Guard were moved south to establish flank protection on the south. The division interpreted "right" flank to mean south flank, and the instructions to place a "flank security detachment south of Bedon" to mean that the Guard Division was responsible for *all flank security in the region south of Bedon*. Actually the corps intended that the Guard should furnish flank protection on the north.

The five battalions which the guard dispatched to the south to protect that flank repeatedly crossed elements of the 49th Reserve Division which was withdrawing to the east, causing great confusion. The German force withdrew successfully and escaped, but this crossing of columns and the confusion caused thereby resulted in both the Guard and 49th Reserve Divisions fighting on the following day under extremely unfavorable circumstances.

From the Reicharchiv account and *Der Durchbruch bei Brezeziny* by Ernest Eilsberger.

DISCUSSION

A force which had been advancing west turned around and withdrew eastward. The right flank had been to the north. Everyone was tired and exhausted. Things were complex enough without having to puzzle over rules for writing orders. When the withdrawal began, it appears that some German headquarters considered the right flank to be the north and some to be the south flank. Normally, the instruction to place "a flank security detachment south of Bedon" would not be misunderstood; we see, however, that it was capable of being misunderstood when considered in connection with other messages and it was misunderstood.

German writers commenting on this have suggested that in such a confused situation, it would be much better not to use the terms "right" and "left."

EXAMPLE IV

On February 24, 1916, the 5th Battalion, 336th French Infantry held a sector in the Woevre, east of Verdun. Germans were attacking Verdun from the north.

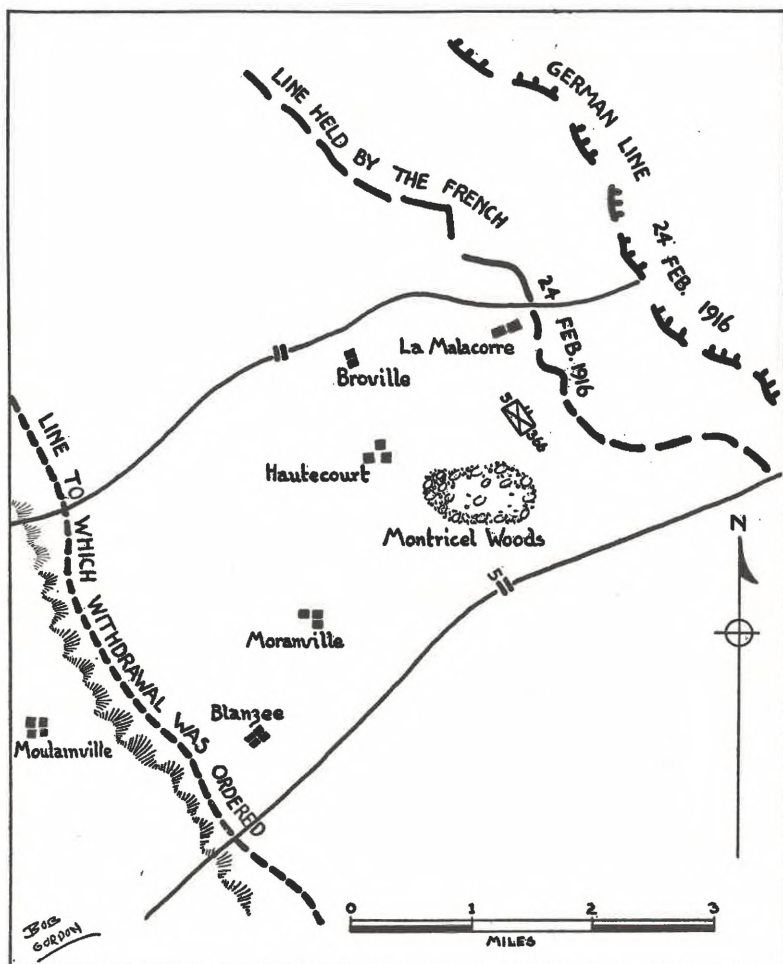
The French decided to withdraw troops in the Woevre to a line closer to Verdun and the withdrawal was ordered for the night of February 24-25.

The division order, however, did not reach the headquarters of its 211th Brigade until shortly after midnight and front-line troops did not receive their orders until about 4:00 a.m., February 25.

The order contained information as to the line to which the division was retiring, boundaries between units, and provision for two battalions of the 211th Brigade to act as a covering force and "hide the movement." All the artillery was being withdrawn and all combat and field trains were ordered to the west bank of the Meuse.

The 5th Battalion was designated as part of the covering force. The division order prescribed the exact disposition it was to make of its companies. The bulk of the battalion was to be located at Moranville and Blanzee, with one company holding Hautecourt and Broville and another company holding Montrichel woods and La Malacorre.

The order further prescribed:



Example IV

“The role of the covering detachments is to keep the enemy in ignorance of our movement. To this end they will fight a delaying action, employing powerful fires. They will each have for this purpose two platoons of machine guns, and will leave in the first line weak out-guards destined to keep enemy patrols in check and cover the withdrawal.”

The order was silent, however, as to when the covering detachments would withdraw.

The withdrawal of the bulk of the division appeared to have been well executed and at 6 a.m. the 5th Battalion in turn began to withdraw by echelon. It was snowing and the movement escaped the Germans' attention at first.

At 10 a.m. the battalion reached the vicinity of Moulainville. At 11 a.m. it received an order to return at once to the positions occupied that morning.

During the march back to its old position the battalion encountered a German attack and did not reach its destination. As a result of the premature withdrawal, several French guns were lost.

From Infantry Conferences by Lieutenant Colonel Touchon, French Army, at the Ecole de Guerre.

DISCUSSION

It is not enough to give an order; the order must arrive in time and must contain the essentials.

The order reached the battalion late. Furthermore, although higher authority here found time to go into the details of just how the battalion would dispose its companies, the order was not clear as to one of the essentials—how long the covering forces were to stay in positions. Though not stated in the order, it had been the intention of the division for the battalion to remain in position until the enemy advanced in sufficient force to drive it back.

The order may have seemed clear to the man who wrote it, but the important thing is that an order be clear to the man who has to execute it. One of the first things which occurs to the commander of the covering forces is "how long do we stay?" For upon the answer to this question depends the entire tactical course of the action.

One reason for brevity and simplicity in orders is that often the recipient has no time to read and digest a long order. Moreover his attention may be so occupied with a multitude of detached instructions that some highly important point may be overlooked. In like manner, if higher authority devotes its attention to solving in orders the details of the problem for lower units, *it may easily*

omit something essential. In looking through a microscope, it may miss the big picture.

Perhaps in the above instance, subordinates may be criticized for not correctly interpreting the order. Even conceding this to be true, the issuing authority cannot be absolved from the greater blame. The order should have left no room for misinterpretation. The elder von Moltke's admonition, "Remember, gentlemen, an order which can be misunderstood will be misunderstood" still holds.

EXAMPLE V

a. The 3d Battalion 5th U. S. Marines on June 6, 1918, was due west of the Bois de Belleau. Late in the afternoon, the captain of the 47th Company, which was part of the battalion, assembled his platoon leaders. He issued an order for an attack, briefly indicated the dispositions and direction of attack, and directed:

"Get your men into position as fast as you can; we attack at 5:00 p.m."

He pulled his watch out, glanced at it and added:

"It is 5:15 p.m. now."

From the personal experience monograph of Captain Raymond E. Knapp, Marine Corps.

b. The 35th U. S. Division attacked on September 26, 1918, and made a deep advance into the German lines. The division then issued an order prescribing a resumption of the attack at 8:30 a.m. on the 27th after a three hour artillery preparation. Among other things the order provided that the 140th Infantry pass through the 138th Infantry. Shortly after the division order had been sent out, an army corps order arrived, specifying that the attack was to be resumed all along the front at 5:30 a.m. An attempt was made by the 35th Division to change its first order. However, since some units had been notified to attack at the late hour, it was considered impracticable to advance at 5:30 a.m. and a compromise hour, 6:30 a.m., was decided upon.

In the midst of the confusion of orders, however, the 140th Infantry at 5:05 a.m. received an order to attack at 5:30 a.m. after a five-minute barrage. The barrage failed to come down, but nevertheless the 140th moved out, passed through the 138th and attacked. Without fire support, however, the advance was soon

stopped with heavy casualties. The order directing that the attack be made at 6:30 a.m. arrived too late.

From the personal experience monograph of Major Fred L. Lemmon, Infantry.

c. The 142d Infantry, part of the 36th U. S. Division, spent October 7, 1918, southeast of St. Etienne, having relieved front-line troops in that vicinity. The 2d Battalion was in front line and the 1st Battalion in support.

Oral orders for an attack were issued during the afternoon to the commanding general 71st Brigade. The brigade commander summoned regimental commanders and, about 8:00 p.m., issued an oral warning order. Formal written orders were not received by the brigade until after midnight and it was not until about 3:00 a.m. that written orders, based on these, went out to the regiments.

In the 142d Infantry the battalion commanders were called to the regimental command post about 3:30 a.m., and given oral orders for the attack which was to start at 5:15 a.m. The battalion commanders hurried back to their battalions to transmit the orders to their companies, but so much time had been absorbed in the higher echelons that little was left for the battalion commanders to formulate and issue their orders to the troops which were to make the attack.

At 5:10 a.m. four company commanders of the 1st Battalion were crouched around a map on the ground near the entrance to the battalion command post. On the map, in bold relief, a red arrow pointed the direction of advance. The names of some towns ahead were given as possible objectives, but none of the company commanders had heard of them or remembered them at the time.

Company B on the left and Company A on the right were designated as leading elements of the battalion. Companies C and D were to follow. Leading companies were to follow the assault battalion at 1000 meters, and take advantage of whatever cover the terrain might afford. No boundaries or other information were given. The American barrage had already started and the Germans were replying with their counterpreparation.

The attack jumped off a few minutes later and achieved a partial success at a heavy price in casualties. More time to acquaint the companies with the situation and tell them what was expected of

them would have been productive of greater and less costly results.

From the personal experience monograph of Major Ben Hur Chastaine, Infantry, who at the time commanded Company A 142d Infantry, and from the monograph *Blanc Mont*, prepared by the Historical Branch, War Plans Division, General Staff.

DISCUSSION

These cases quoted are not exceptional ones. Almost every unit in the A. E. F., at one time or another, had the unpleasant experience of receiving orders too late. Such instances were generally the result of too much time being absorbed by the higher echelons, —divisions, brigades and regiments—in preparing, issuing, and transmitting their orders. In consequence, the junior officers in these instances had no time to make proper reconnaissance or issue proper orders of their own.

No matter how complete, how accurate, and how correctly drawn up an order may be, it fails of its purpose if it does not arrive in time.

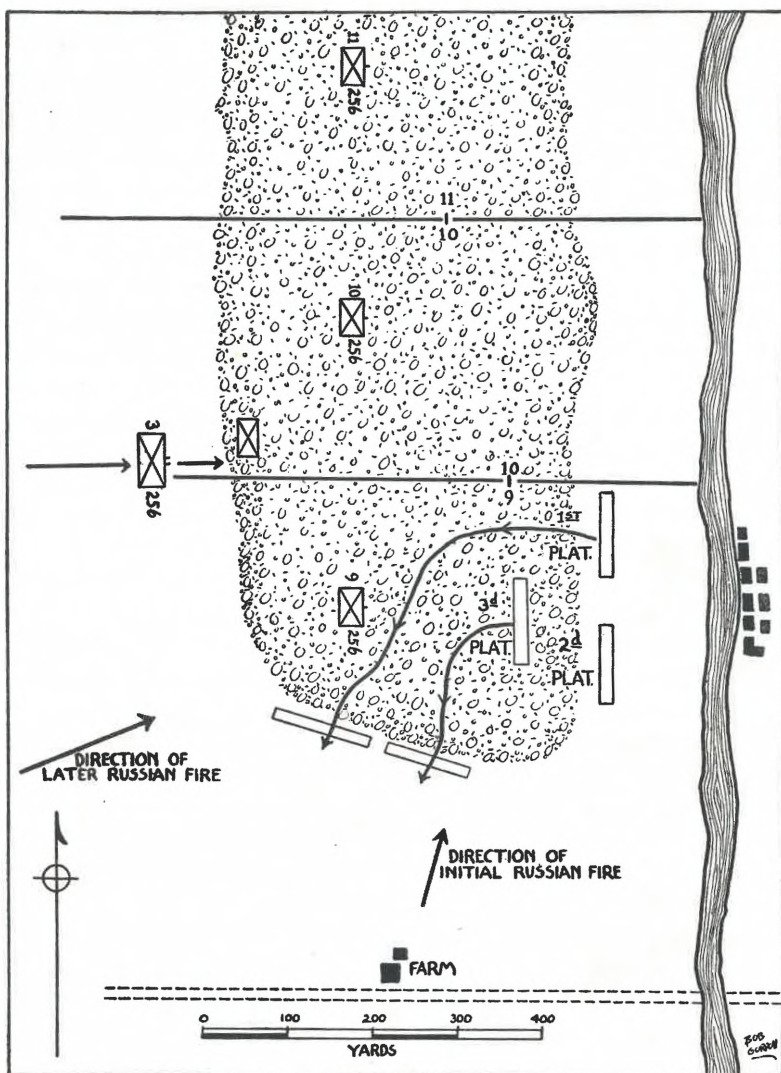
EXAMPLE VI

In September, 1915, the German 256th Reserve Infantry was marching eastward into Russia after having been engaged in heavy fighting a few days before. The regiment was meeting little resistance. On September 20th about 10 a.m., however, the battalion commander of the 3d Battalion, who had ridden forward, returned and informed his subordinates:

“The Russians have attacked our cavalry with strong forces and pressed it back. We are to assist it. About two kilometers in front of us is a river which we are to defend.”

Arriving at the river they found it to be wide and quite deep. On the far bank was a village. There were no Russians, no German cavalry, no sounds of firing. The commander ordered:

“Over there on the right about 500 yards away is a farm; a battalion of another German unit will be there. We defend generally along this edge of woods to the left. The 9th, 10th and 11th Companies, from right to left, in front, each with a sector 300 yards wide. The 12th Company will be in reserve behind the middle of the battalion. To our left is cavalry. Send patrols across the river. I will get in touch with the cavalry.”



Example VI

The 9th Company commander first sent out a patrol toward the farm. He then left his company in the wood and with a few subordinates, advanced to the river about 200 yards in front of the wood to reconnoiter. Having decided to place two platoons in

front line near the river, and hold the 3d Platoon in reserve, he issued a complete order and platoon leaders returned to their units.

The company commander remained near the river looking for a boat. Looking back he saw his platoons moving forward. Suddenly a shot was heard toward the right. The company commander at first thought this his men were shooting pigs, but as the firing increased he concluded a Russian patrol had been discovered on the right. Soon, however, more rifle bullets, which he knew to be Russian by their sound, whistled over his head from the right rear.

He ran back with his runners to the reserve platoon. On the way he gave to a runner, whom he knew he could depend upon, this order:

"The left platoon will retire into the wood, and get ready to follow me in attack toward the farm. The right platoon will defend the entire company sector. Give this order to the platoon commander and then report this decision to the battalion."

On reaching the reserve platoon which had faced toward the farm and was replying to the fire coming from that direction, the company commander ordered:

"The whole platoon will attack in double time toward the farm."

The platoon was advancing through the wood toward the farm when a messenger from the patrol arrived with this message:

"The patrol is north of the farm. The Russians are at the farm. They are trying to get around us."

Upon reaching the edge of the wood where he could see the Russian position the company commander ordered:

"Lie down, range 400, commence firing."

Heavy Russian fire from many rifles responded. Meanwhile a runner reported: "The 2d Platoon is 200 yards behind us."

The company commander called out: "I am attacking with the 2d Platoon on the right. This platoon will keep up the fire and then join the attack."

The company commander ran back to the 2d Platoon, and led it forward on the right. During the movement he pointed out the position of the platoon already engaged and gave the order:

"There are Russians on this side of the river near the farm. We are attacking."

As the platoon emerged from the wood, it received very heavy

fire on its right flank. The Russians were not only much stronger than expected but were farther across the river than had been believed possible. At this moment a runner from the battalion commander reported:

"The Russians have broken through the cavalry. The battalion commander is wounded."

As there were no signs of the battalion which was to be on the right, the company commander, 9th Company, decided to retire. This was accomplished successfully.

From an address at The Infantry School by Captain Adolf von Schell, German Army, who at the time commanded the 9th Company.

DISCUSSION

The more difficult the situation, the less time there will be to issue long orders. Furthermore, men will be excited, and only the simplest movements can be executed.

Usually the first order for the fight can be given without hurry. It should therefore be complete, containing everything necessary. Above all the mission and the information at hand should be given. Both the battalion and company commanders in this case issued orders for defense which oriented all concerned.

Once combat has started, new long orders are impracticable. Instead the situation must be met, as in this case, by fragmentary orders. Brevity and clarity are the essentials of good fragmentary orders. In the foregoing example the company commander successively met a changing and difficult situation by the shortest of orders. The situation was critical and had time been taken to issue long formal orders the battalion would have been cut off. The troops being veterans, an indication of what was desired was enough.

CONCLUSION

The tests of a good order are:

1. That it express adequately the will of the commander.
2. That it be unmistakeably definite and clear to the subordinates who are to carry it out.
3. That it cover the essentials.
4. That it be issued early enough to reach subordinates in time for them to execute it.

CHAPTER XI: COUNTERORDERS

Rapid changes in a situation necessitate changes in decisions. Counterorders will therefore be frequent and should be accepted as normal incidents of battle.

ONCE MADE, decisions should not be changed except for weighty reasons. Infantry commanders, however, are constantly confronted with changes in the situation that demand new schemes of maneuver and consequently new orders. With such kaleidoscopic suddenness does the situation veer and shift that it is not unusual for a subordinate unit to be ordered to initiate a certain line of action only to have the order countermanded before the action has gotten under way.

When counterorders do occur it becomes a paramount duty of all leaders to curb irritation and the instinctive tendency to criticize. Success in combat is certainly not rendered more likely by the muttered criticisms of junior officers—criticisms which rapidly and seriously affect the moral tone of the entire personnel.

Responsibility for changing a mission rests squarely with the commander. When the march of events has invalidated his original assignment he must of necessity take the new situation into account. Behind every counterorder there is usually a valid reason. If we are able to adopt the French proverb "To understand all is to forgive all" we shall meet changing orders with greater equanimity.

EXAMPLE I

The 2d Company 57th Infantry, part of the 14th Division, which in turn was part of the Second German Army, made a long march to the south on September 5, 1914, in pursuit of the retreating French. The 14th Division, on the right of the army, passed east of Montmirail.

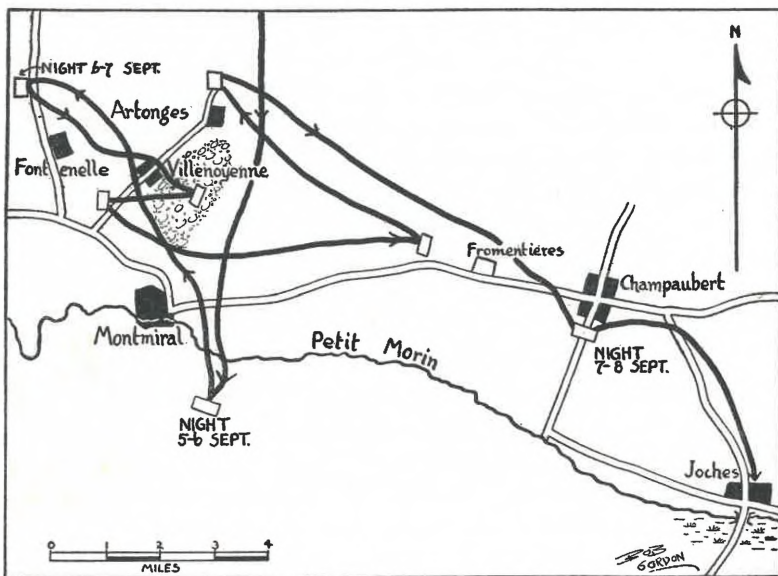
The 2d Company crossed the Petit Morin and spent the night in a small village south of the river. At daylight, September 6, heavy cannonading was heard to the south. Instead of marching

toward the sound of the guns, the 14th Division moved to the north.

Consternation began to spread through the ranks of the 2d Company. The men could not find out why they were required to march to the rear. They had never done so before. About noon word passed that the division was in army reserve. A little later the column halted along the main road from Chateau-Thierry to Fontenelle. Good spirits soon returned. Men felt that the battle must be going well because the reserve was allowed to rest. At dusk the sound of artillery firing died down.

In the early morning of the following day, September 7, these troops made a short march into a wood near Artonges. There they encountered badly damaged supply wagons returning from the front. The drivers told of a German retreat, of heavy casualties, of defeat. The men again became apprehensive.

At 8:00 a.m. the 2d Company marched to Villenoyenne and began digging in. The situation was baffling. They had been driving the French to the south. Suddenly they had marched to



Example 1

the north with ominous rumors of a German defeat. Now the whole division was digging in facing to the west. Where could the First Army be? Leaders sensed a certain anxiety among the troops.

At 11:00 a.m. orders arrived directing that intrenchment cease and that the division start a forced march on Fromentieres to the east. The march was long and difficult. Again and again the column had to cross long trains of ammunition and supply wagons going to and from the front.

At 1:00 p.m. the column was halted, although it had not yet reached Fromentieres. Orders had been received to counter-march on Artonges. These bewildering changes reacted badly on the men. It appeared to them that the higher commanders were unable to decide on any course of action.

Artonges was finally reached at 5:00 p.m. Officers and men sat about discussing the events of the day, trying to deduce their meaning. At 8:00 p.m. the command was informed that the French had penetrated the left wing of the army and that during the night the reserve would march to their assistance without rest and without regard for march casualties.

It was very dark when this forced march began. Part of the route led across country. Once more the direction of march was east. The impression gained headway among the troops that the battle was going badly. At 1:00 a.m. on September 8 the reserve reached its destination near Champaubert. The men dropped to the ground in the sleep of exhaustion. In three hours they were aroused. They had expected to attack at daylight; instead they continued the march to the east. No one knew why. Arriving at Joches definite orders were finally received to attack to the south.

Now let us consider the reasons for these movements. The Second German Army and the First Army on its right were directed to execute a wheel to the west. The left or east wing of the First Army was, on September 5, farther advanced to the south than the Second Army. Therefore, if the wheel were to be made, the right or west element of the Second Army (the VII Corps consisting of the 13th and 14th Divisions) was superfluous at the front at that time. Consequently it was designated as army reserve and ordered to move north to Montmirail.

On September 6 all corps marching to the south were engaged in heavy fighting. The 14th Division remained in army reserve. A French attack from the direction of Paris against its right flank had caused the First Army (on the night of the 2d) to shift troops from south of the Marne to the north to meet the threat to its flank. Thus the 14th Division heard rumors of defeat.

The gap resulting between the two armies, being protected only by cavalry, was a weak spot. It was obvious, therefore, that the right flank of the Second Army would have to be refused. Only the left wing would continue the attack. In this plan the 14th Division, situated behind the right wing, was allotted the task of securing the right flank. Accordingly we saw it digging in, facing west.

Meanwhile a desperate battle had begun along the entire army front. No decision was reached. Reports of the situation in front of the gap between the First and Second Armies did not appear critical at this time. The army commander naturally wanted his reserve centrally located. Hence the march to Fromentieres.

In the meantime new messages reached the army which forced it to guard its right flank. The 14th Division again marched back to the threatened right wing.

On the evening of September 7 fresh intelligence indicated that the French had penetrated between two corps of the Second Army. The only available reserve had to make that difficult night march. Later the situation cleared up and the danger to this particular portion of the front dissipated.

On the morning of the 8th it was thought that a weak point had been located in the hostile front. Owing to the situation on the right flank it was imperative that a decision be reached promptly. Hence the troops of the army reserve were awakened after three hours' sleep, marched farther to the east and ordered to attack.

From the personal experience monograph of Captain Adolf von Schell, German Army, who at the time commanded the 2d Company 57th German Infantry.

There is no question that these apparently aimless marches affected the fighting capacity of the troops. Undoubtedly morale suffered. Perhaps the army commander changed his mind too often. Perhaps he jumped at conclusions too quickly as reports

filtered in. But regardless of whether or not each of the decisions was best, the following fact must be realized:

Each move corresponded to a definite conception of the situation. They were not the result of a commander's whims but an honest effort to meet the situation as understood at Army Headquarters.

Such counter-orders are virulent irritants but leaders, by precept and by example, may do much to instil calmness and fortitude in accepting these inevitabilities of war.

EXAMPLE II

During the early days of the Meuse-Argonne offensive the 30th U. S. Infantry of the 3d Division was held in the Bois de Hesse in corps reserve from September 26 to September 30. The men lived in shell holes with little or no protection from the unending rains of "sunny France."

For two consecutive days order followed order with weary monotony—"be prepared to move at a moment's notice." Finally, at 9:00 p.m. the night of September 29-30, an order was received directing that packs be rolled and that the regiment be held in readiness for an immediate move. After a two-hour wait in a torrential rain a new order arrived stating that no move would be made that night and that men would be permitted to pitch tents.

One hour later, at midnight, a third order was received directing the battalions to be ready to move in 30 minutes. The movement actually took place at 3:30 a.m.

From the personal experience monograph of Captain Turner M. Chambliss, Infantry.

DISCUSSION

Frequent changes of orders seriously affect morale. Men lose confidence in their superiors. "Order—counter-order—disorder," is more than a pungent expression—it borders perilously close to truth. Pointless vacillation, whether it be the lieutenant with his platoon or the general officer with his army, cannot be too vigorously condemned. Only the exigencies of a changing or obscure situation can justify the serious effects of the counter-order.

In this instance it is believed that the apparent indecision was the result of varying information concerning the situation of the

79th Division. The 3d Division relieved the 79th on September 30, *making a daylight relief*, upon the receipt of information which indicated, or which was interpreted to indicate, that the situation of the 79th was critical.

EXAMPLE III

The 82d Reserve Regiment, part of the main body of the 22d German Reserve Division, marched south toward the Marne on September 5, 1914. It was part of the IV Reserve Corps which had been assigned the mission of protecting the flank of the First German Army from the direction of Paris.

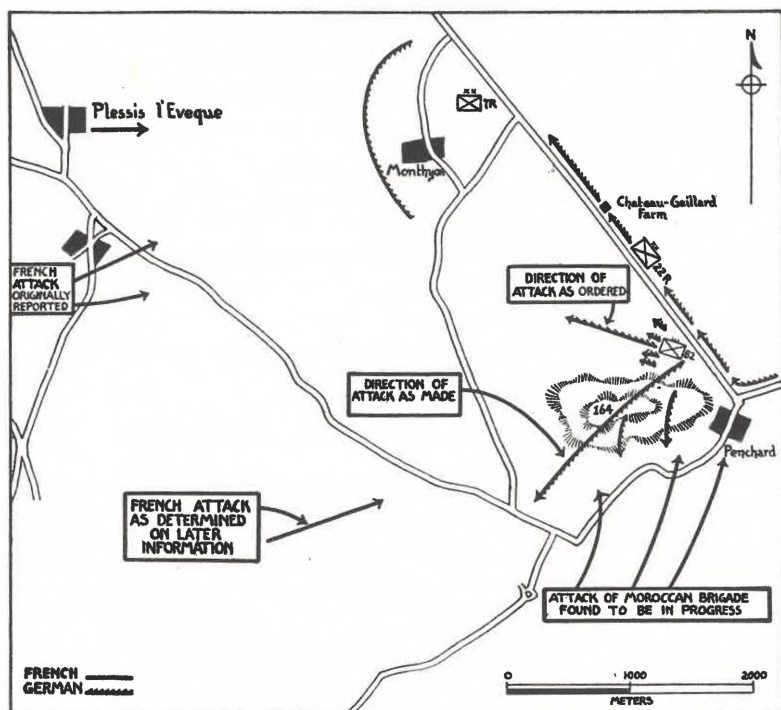
About noon the troops were going into bivouac in accordance with their orders when a counter-order arrived directing the column to march west to Penchard. A short time later firing was heard to the west.

The 7th Reserve Division, north of the 22d, which was also marching west, had become engaged with the French near Monthyon. The 22d was ordered to advance in echelon on its left. Accordingly, on reaching Penchard, the leading elements of the 22d Division turned northwest toward Monthyon.

The French were reported in the vicinity of Iverny and Plessis l'Eveque. The 7th Reserve Division, whose units were deployed and considerably intermingled, was near Monthyon. The 83d Reserve Regiment (part of the 22d Reserve Division) was still near Penchard when a hostile advance was noted driving from the south of Iverny toward Chateau-Gaillard. This threatened to take in flank the 7th and 22d Divisions which were moving on Monthyon.

The 82d Reserve Regiment was ordered by the division commander to attack at once in the direction of Plessis l'Eveque. The regiment began deploying under cover of the valley northwest of Penchard. Orders were being issued, plans made, officers studying the terrain to the northwest. Suddenly the regimental commander ordered that the regiment wheel and attack to the south and southwest. At the moment he was about to launch the northwest attack he had learned that strong hostile elements were advancing from the west on Penchard and Hill 164. Violent firing was heard to the west and southwest.

The regimental commander promptly abandoned the objective



Example III

and direction of attack assigned him. He caused his entire regiment to face to the southwest and attack straight over Hill 164.

The 82d reached the south and west slopes of Hill 164 in time to check an attack of the Moroccan brigade which was entering Penchard from the southwest. Leading elements of the Moroccans had already reached the slopes south of Penchard and were approaching Hill 164. Those elements that had reached Penchard opened fire on the German trains that congested the road and caused a panic.

The prompt action of the 82d Reserve Regiment took the Moroccans in flank and rear, reestablished the situation and drove the enemy back.

From the account by Lieutenant Colonel Koeltz, French Army, of the First German Army in the Battle of the Ourcq in the *Revue D'Infanterie*, October, 1930, based on German official documents.

DISCUSSION

Here we have a case where an infantry commander who was ordered to do one thing, disobeyed, and did something entirely different. He was ordered to attack to the northwest and take a French attack in flank. Instead he attacked to the southwest.

He took the responsibility of disobeying a definite order because he realized that the order had been given in ignorance of the existing situation. He felt sure that he was doing what his superior would want him to do, and that there was no time to ask for instructions.

The troops, of course, received numerous counter-orders. "We are going to halt for the night." "No, we march to the west—why to the west?" "We are to attack to the northwest." "No, we attack to the southwest."

The turn to the west and continuation of the march just as the troops were going into their announced bivouacs, was the result of a decision by the corps commander, General von Gronau. He had the mission of protecting the right flank of the First Army from the dangerous direction of Paris.

Late in the morning of September 5, suspicious movements were reported on his right flank, a short distance to the west. The situation was obscure. General von Gronau made the decision to turn to the west and attack in order to clear up this vague situation. He struck the Sixth Army of Monoury as it was moving forward to get into position for a decisive attack on the 6th. General von Gronau's counter-order was based on information received late in the morning.

The counter-order issued by the commander of the 82d Reserve Regiment to attack to the south and southwest, instead of to the northwest as the regiment was preparing to do, was similarly based on late information.

Had the 82d Regiment blindly followed its original orders it appears that the Moroccan brigade might well have secured Penchard and Hill 164, thereby taking both the 7th Reserve Division, deployed west of Monthyon, and the 22d Reserve Division, then moving northwest, in flank and rear.

Here counter-orders were the manifestation, not of vacillation, but of aggressive leadership of a high type. The corps commander

and the regimental commander, each in his sphere, met and dealt with an obscure and changing situation. To do so, counter-orders were required.

CONCLUSION

These three examples detail numerous counter-orders. Every operation of the World War abounds in them.

These examples indicate that all counter-orders are not the result of vacillation and inefficiency. Many of them, probably most of them, result from the obscurity of war. In mobile warfare we know the situation will invariably be vague. As information filters in to the higher commanders, changes in dispositions will be required. The information on which these changes are based will seldom reach the lower units at the time. They will read about it in a book after the war.

Counter-orders, therefore, must be regarded as normal, accepted cheerfully and passed downward in that spirit.

CHAPTER XII: SUPERVISION

Leaders must verify the execution of their orders. The more untrained the troops, the more thorough and detailed this supervision should be.

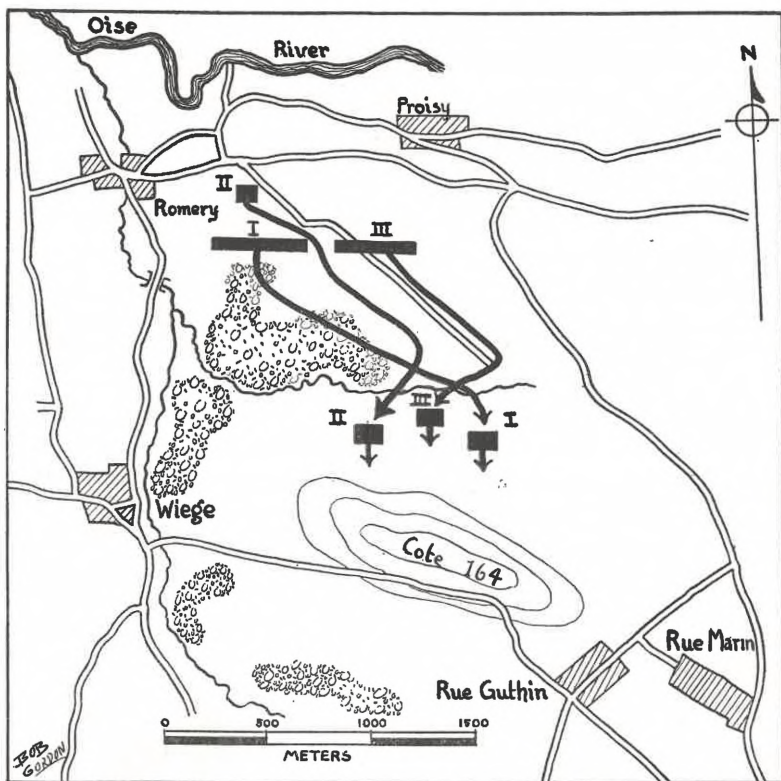
A SUPERFICIAL reading of military text books is likely to convey the idea that the duties of a leader consist only of estimating the situation, reaching a decision, and issuing his order. It is evident, however, that, unless the orders of the commander are executed, even the most perfect plan will fail. On the other hand a poor plan, if loyally and energetically carried out by subordinate leaders, will often attain success.

A commander, then, must not only issue his order but see to its execution. It is the omission of this latter step that has caused many brilliant plans to go awry. Too often a leader assumes that once his plan is completed and his order issued, his responsibility for the action terminates. He seems to feel that he has discharged his obligation and that the execution remains entirely with his subordinates. Such an assumption is false even when dealing with veteran troops. Where poorly-trained troops are involved, the necessity for vigilance and supervision becomes even more imperative. Initiative must not be destroyed but the commander must nevertheless bear in mind the fact that the final credit or censure for the result of the action rests squarely with him. Consequently, he is not only justified, but is seriously delinquent, if he fails to carry out the supervision necessary to insure the proper execution.

The natural objection to the foregoing is that a leader cannot be everywhere at the same time. This is answered in that he must weigh the capabilities and limitations of his subordinates, determine the critical point, or time, of the action and lend the weight and authority of personal supervision where it is most needed.

EXAMPLE I

On the foggy morning of August 29, 1914, the 2d Guard Regiment of the German Army was just south of the Oise River. The



Example I

situation to the front was obscure. French outguards were known to be a mile to the south but the strength and intentions of their main force remained problematic. For several days the French had been withdrawing.

The 2d Guard Regiment was ordered to advance, making a first bound to the high ground near Hill 164. It was directed that the movement be made with the 1st Battalion on the right as base unit, the 3d Battalion on the left, and the 2d Battalion to follow in the second echelon behind the center.

Neither the regimental nor the 1st Battalion commander gave the direction of march by compass bearing. Routes of advance were not reconnoitered.

The 1st Battalion descended the slopes of the ridge east of

Romery, and reached a wooded valley which it took for the valley leading to Wiege. After marching for half an hour the battalion reached the edge of the wood, but found no Wiege. The battalion commander halted his organization. Maps were produced. Officers became involved in a discussion as to the location of the battalion. It was lost.

At this time the brigade commander, Major General von Schach, arrived. He showed the battalion commander that he had followed the valley leading from Romery to the southeast and that if the regiment continued its march, it would not reach its objective, but would march diagonally across the zones, first of the regiment and then of the division on its left.

The brigade commander caused the regiment to correct its error, and it reached the correct position successfully. This proved of great importance for the French had ceased retiring and were making a stand.

From *The German Guard at the Battle of Guise*, by Major Koeltz, French Army, appearing in the *Revue D'Infanterie*, June, 1927.

DISCUSSION

Except for the fact that the brigade commander was well forward, supervising the execution of this movement, the attack of the brigade, and very possibly the attack of the entire division, would have been launched under most unfavorable circumstances. Had the brigade commander given orders and then remained at a command post in rear, one of his regiments would have gone wandering off into the zone of another division.

The brigade orders were correct; it was the execution by the regiment which was at fault. We may well put down for reference the fact that neither the regimental nor battalion commander had given the direction by compass.

Fortunately, the brigade commander knew that, even with such excellent troops as the German Guards, mishaps and mistakes occur, and that after an order has been given, it is necessary to see that it is properly executed.

EXAMPLE II

On October 9, 1918, the 92d Division took over the Marbache sector. On November 1st it had been in line for three weeks.

During this time patrols were ordered out nightly and at least two raids were attempted but no prisoners were captured. During the period November 1st to 9th it was particularly desired to secure prisoners, in order to discover any preparations on the part of the Germans for a withdrawal along this part of the front. It soon became evident, from conflicting reports sent in by these patrols, that many were not going far beyond their own wire. Consequently a staff officer of the 183d Brigade (92d Division) was directed to keep a large scale patrol map on which were entered the routes of all patrols as shown in their reports, together with any detailed information, such as location of hostile wire, lanes through wire, trails, and enemy outposts. It was soon possible, by checking patrol reports against recent maps and aerial photographs, to determine which were reliable.

From the personal experience of Captain Roy N. Hagerty, aide-de-camp to the brigade commander, 183d Infantry Brigade.

DISCUSSION

This example shows one form of supervision that a staff may take to assure itself that the orders of the brigade commander are being carried out. Junior officers—lieutenants and captains—had failed to see that orders were executed. It was not practicable for the brigade commander or his staff to go out personally with the patrols, but they could and did deduce from the means at hand which patrols were actually going out, and which were sending in misleading reports.

This incident illustrates the necessity for close supervision of troops and of junior officers who are partly trained, and whose discipline and morale are questionable.

It would have been desirable to have relieved all unreliable junior officers, but this was not practicable at the time.

EXAMPLE III

During the period September 26-October 6, 1918, the 305th Infantry with Company D, 305th Machine-Gun Battalion attached, took part in the Meuse-Argonne offensive. Most of the officers of the 2d Battalion 305th Infantry had been recently promoted or had just joined and were new to their jobs. A few days previously the battalion had received replacements, many of whom had little

training. These replacements constituted about twenty per cent of the effective strength. There were several instances during the ensuing action when men asked officers how to place a clip of cartridges in a rifle.

Late on the afternoon of September 30 the 2d Battalion reached a position near the Naza ridge where the Germans were making a determined stand. It was too late to organize and launch an attack so the battalion was ordered to halt and dig in. The terrain was broken and shell torn. The ridges closely resembled one another. No two officers could agree from a study of the map as to what ridge they were on. The battalion commander disregarded the map, and taking all company commanders, made a personal reconnaissance, assigning sectors. Company commanders then led their companies in single file to the vicinity of their positions.

Early on the morning of October 1 the battalion commander inspected the dispositions. He found a wide gap between the 305th Infantry and the 28th Division on the right which had to be closed by the battalion reserve.

There were two machine guns attached to each company. These had been placed on the extreme flanks of the company line with complete disregard for fields of fire. In one case machine guns had been placed some 50 yards beyond the rifle company, without a single rifleman near enough to protect them. The machine gun company commander had not been consulted in locating these guns.

Inspection of machine-gun emplacements showed that two had been dug so that the crew would be well protected even when firing—although any firing done would have to be at an angle of 45 degrees.

From the personal experience monograph of Major Erskine S. Dollarhide, who at the time, commanded Company D 305th Machine-Gun Battalion, attached to the 305th U. S. Infantry.

DISCUSSION

The fact that soldiers were found in the front line who were unfamiliar with the simplest fundamentals of their weapons must appear incredible. Yet such conditions were not uncommon in our army during the World War and they may be expected in any

future conflict of major proportions. They serve to reemphasize the necessity for careful supervision.

We see a lack of training in map reading on the part of company officers, making it necessary for the battalion commander to conduct his unit commanders to their areas. Later, partly because of the character of the terrain and partly because the troops were unaccustomed to night movements, we see company commanders guiding troops into their positions by hand. The next day the battalion commander inspected to verify his orders of the preceding night. In spite of all his previous efforts he found a gap on his right flank. Fortunately, his vigilance enabled him to discover this serious discrepancy in time to take corrective measures.

Finally, the necessity for supervising such detailed work as the siting and construction of machine-gun emplacements, is clearly demonstrated. Personal safety is likely to be uppermost in the minds of partly-trained troops and only the most rigid supervision will insure that the individual is doing his duty.

EXAMPLE IV

General Petain, later commander-in-chief of the French Armies, commanded a corps in the spring of 1915. His unit was directed to take part in the French attack in Artois on May 9, 1915. General Petain, after issuing his orders, repeatedly questioned subordinates in regard to their conception of the manner in which they would carry out those orders. He is said to have questioned each gunner in regard to his part in the attack, and to have supervised the registration of each artillery piece.

DISCUSSION

This is undoubtedly an extreme example of supervision and one which is rarely practicable. The results justified General Petain. His corps achieved a remarkable success. It rapidly overran the German defenses in its front and effected a deep penetration. Petain's corps was the only one to achieve such a signal success in this general attack.

EXAMPLE V

On the evening of June 1, 1918, the 7th U. S. Machine-Gun

Battalion (two companies) was occupying positions on the south bank of the Marne at Chateau Thierry. Company B was disposed with one platoon covering the right flank of the battalion, and two platoons generally covering a bridge across the Marne.

French troops who had been fighting north of the Marne began withdrawing south of the river, and a German attack developed against the American position on the south bank. Germans were reported to have crossed the Marne in the darkness. The battalion commander had exercised little supervision of the companies' operations. The situation as it appeared to the B Company commander is described in the personal experience monograph of Major John R. Mendenhall, Infantry, who at the time commanded Company B. He says:

"To the Captain of Company B the situation appeared desperate. Runners sent to Battalion C.P. failed to return. His own reconnaissance and the report of a lieutenant from Company A, who had been on the north bank, convinced him that, without rifle support, B Company could not avoid capture and was ineffective in the positions it then occupied. Moreover, failure to gain contact with the Battalion C.P. implied that it had moved, probably to the rear, and orders had been to cover such a withdrawal.

"He (the commander of Company B) therefore sent oral messages by runners to his platoons, directing the 1st and 3d platoons to withdraw to the second line position, and the 2d, which he hoped was still commanding the bridge, to cover the withdrawal."

The company commander then went to the battalion command post. He found that it had not moved, and there he received orders for Company B to regain its former positions. The captain, with his headquarters personnel and four reserve guns, moved back to the bridge. He found the 2d platoon had gone, as well as the others.

In his monograph Major Mendenhall describes a fight in the darkness between Germans, who could be recognized by their helmets, a few French, and the crews of the reserve guns of Company B which went into action.

"The combined fire of these guns drove the remaining Germans across the bridge," he says. "The guns were then moved to positions from which they held the south bank until daylight when

the remainder of the company was reestablished in its former positions.

"Investigation later," says Major Mendenhall, "showed that the runners, becoming confused, had delivered the company commander's order to each of the three platoons as 'Withdraw at once'."

Let us now see what happened to the two platoons near the bridge. This is described by First Lieutenant Luther W. Cobbey, who commanded one of these platoons:

"About 9:30 p.m. a runner came to me with an order to retreat with all possible speed; that the Germans had crossed the river and were on our side. Supposing that the Germans had made a crossing without my knowing it, I followed instructions given, which instructions were nothing less than to 'beat it.'"

"Going through an enemy barrage, we went to the rear about four kilometers and up a hill overlooking the river, where the French had prepared a line of resistance. On arriving I found Paul (Lieutenant Paul T. Funkhouser, commanding a platoon of Company B) with his platoon, Paul having received the same order as I.

"After putting our guns into position, we waited on this hill, expecting the Germans to make an attack at any moment. At about 1 a.m. Paul said to me, 'Don't you think we had better go back into Chateau-Thierry and find out whether the Germans were actually in the town?'

"Paul and I took one runner and started back. We finally reached the place we started from and to our surprise found there were no Germans on our side of the river. We immediately went to Battalion Headquarters for information as to why we had been ordered to retreat. The major denied any knowledge of our retreat, and showed no interest in the matter. He didn't seem to give a darn what we had done or might do.

"Paul and I felt that the only thing to do was to go back and get our men and guns and get into action again in our old positions, which we were finally able to do about daylight."

DISCUSSION

This battalion was very fortunate. No serious reverse resulted

as might easily have been the case. The incidents described afford a triple illustration of the value of and necessity for supervision by commanders.

First, partially because of lack of supervision and control by the battalion commander, one company began a withdrawal that was unauthorized and contrary to the desires of the battalion commander. Since he had not kept in close contact with Company B, since he did not supervise its operations (either personally or through a staff officer), the battalion commander must be credited with a share of the responsibility for its withdrawal. During the operations he gave his subordinates the impression of inactivity and indifference, as indicated by the account of Lieutenant Cobbey.

Secondly, as the captain of Company B discovered, orders, particularly oral orders sent by runner, may easily be altered in the transmission, or misconstrued. It may be necessary to give such orders in the haste and confusion of battle but the next step must invariably be a verification of the execution.

A commander cannot issue instructions to a subordinate unit and divorce himself thereafter from its activities.

Finally, this example shows that errors which are promptly discovered may be repaired. The captain of Company B, although too late to keep his platoons from withdrawing, was able, through the use of his four reserve guns, to prevent disastrous consequences.

Misunderstandings can be expected in war. The next best thing to a perfect performance is the prompt detection and correction of errors.

A commander who closely supervises the operations of his subordinates, even if he cannot prevent blunders, will frequently be able to remedy them.

A commander who fails to exercise supervision will usually learn of the blunder after the disaster has occurred.

CONCLUSION

All military organizations, whether composed of veteran regular troops or of hastily raised and partly-trained citizens, will misunderstand orders. Also, through fatigue, inertia, or fear, induced by the unfamiliar conditions of battle, they will fail to carry out

orders unless the commander exercises a continuous and untiring supervision.

The conception of a simple and workable plan is important; the issuance of a clear and understandable order is important; supervision to see that the will of the commander is executed by subordinates is all-important.

CHAPTER XIII: CONTROL

The primary consideration of a leader in battle is the control of his unit.

EVERY trained soldier knows that control is essential to success in battle, but combat records afford ample evidence that the measures necessary to retain it are frequently neglected in the early stages of a war. The reason is plain. Officers without combat experience—even those who have had considerable peace-time training—do not fully appreciate the difficulties of control under battle conditions. There is a tendency to take it for granted—to assume that it will be there when needed. That this is not the case is a fact that cannot be over emphasized.

In order to maintain control in battle, the leader must keep constantly in mind the supreme importance and great difficulty of the problem. The control factor must be given careful consideration in every tactical decision. This requirement is absolute; for no plan can be carried through, no previously conceived maneuver executed, no fleeting opportunity grasped, unless a leader has control of his unit. If he has it, even indifferent troops may obtain decisive results. If he does not have it, the most highly trained organizations become partially or wholly ineffective.

During certain phases of an action control may be temporarily sacrificed for other advantages—such as a reduction of casualties. This sacrifice however, is justified only when the leader can and does make definite and certain arrangements for regaining control of all elements of his command before he has occasion to employ it in a critical situation. In such cases special precautions must be taken to avoid losses by straggling, skulking, and confusion of direction.

The test of control is the ability of the leader to obtain the desired reaction from his command. Conditions within the unit which have an important bearing on the problem of control are: its permanent organization, its morale, its state of training, the capacity of its subordinate leaders, and the mutual knowledge of men and officers of each other.

The more thorough the training, the easier the solution of the problem of control becomes. The less training, the more difficult it becomes, with consequent necessity for closer supervision on the part of the leader. For example, a company is attacking and the reserve platoon has been ordered to move through some woods and attack the flank of enemy resistance which has stopped the other two platoons. Well-trained personnel might be able to carry out this order without close personal supervision, leaving the company commander free to direct the company as a whole. With inadequately-trained personnel however, it probably would be necessary for him to accompany the reserve platoon which is the element executing the difficult movement.

A constant difficulty in the measures taken for control is the necessity for avoiding interference with subordinates in their functions of planning and execution. The well-known rule of telling the subordinates what to do and not how to do it should be followed. The capacity of the subordinate, however, must be considered in determining the extent to which he may be allowed freedom of action. A subordinate leader of known ability and experience may be given considerable latitude without endangering control. With one lacking in intelligence or resolution, it will be necessary to check the execution of even the most simple orders.

Some means by which control is facilitated and maintained are:

- Simplicity of plan

- Clear, brief, and definite orders

- Suitable formation

- Position of the leader

- Personal example of the leader

- Method of exercising command

- Organization of communication within the unit

- Knowledge by the leader of the location and situation of subordinate elements

Provision against definite disintegrating influences which can be foreseen — convergent rather than divergent movements, tactical plan based on easily identified terrain features, etc.

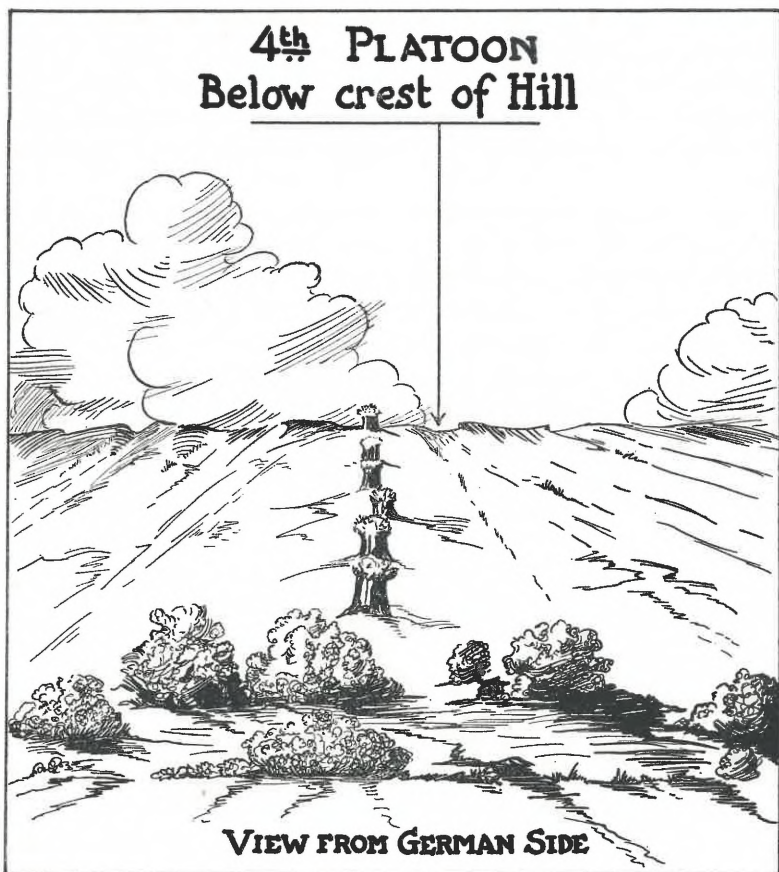
- Constant supervision over the execution of orders given

- Seizure of opportunities to reorganize and reassert authority and control.

EXAMPLE I

The 4th Platoon 7th Company, 153d French Infantry, on August 19, 1914, made an approach march of some three miles in the preliminary phase of the battle of Morhange.

This platoon contained some forty regular soldiers and about fifteen reservists who had been called to the colors three weeks before. These reservists so recently called back to the colors had forgotten much of their former training, and consequently lacked



Example I

at this time the dependability, confidence, and aggressiveness of the other members of the platoon.

The platoon progressed some two miles under artillery fire which fell each time the platoon exposed itself. This fire was continuous, and it was obvious that the German artillery had ranged on prominent terrain features, because its first shells were always right on the target.

The platoon, because of good leading and good luck, had lost only two men, although the 7th Company had lost thirty-three men.

Late in the afternoon the platoon was sheltered behind a bare crest which it had to cross. This crest was out of small-arms range, but was probably within 3,000 yards of the German artillery. A company to the left of the platoon attempted to cross this crest in skirmish line and was shot to pieces. The platoon witnessed this.

The leader of the 4th Platoon noted that in front of the crest was a ravine offering cover. The only cover on the crest and the slope leading down to the ravine consisted of a single line of shocks of grain, each shock several yards apart. These shocks ran over the crest and down into the ravine.

The platoon leader decided to pass the crest, one man at a time, running from one shock of grain to another. He led the way and directed his platoon to follow. On reaching the ravine he stopped, until, one by one, the platoon had rejoined him. The enemy had not fired on the platoon. When a complete check of his men had been made there were twelve men missing—all reservists. The platoon leader had not left anyone behind with specific instructions to see that all men made the movement forward.

From the studies on the advance of infantry under artillery fire by Commandant A. Laffargue (based on actual experiences of French troops in the World War). Commandant Laffargue was the platoon leader in question.

DISCUSSION

In this situation there are several factors that should be considered. The formation adopted for crossing the crest was undoubtedly sound and correct. It enabled the platoon to escape notice, thus avoiding accurate hostile fire, which had been so disastrous to the adjacent unit.

The nerves of the 4th Platoon probably were shaken by seeing the disaster to the company on the left. Therefore it would appear that in this case the personal example and position of the leader were correct. By going first, he encouraged the men to follow.

The formation adopted surrendered control, but this was met and solved by prescribing the length and method of the advance, and by leading the way the platoon leader was enabled to reorganize his unit and regain control as elements reached the ravine.

However, the platoon leader neglected the rear portion of his command problem. He did not delegate to an individual or individuals the responsibility of seeing that the entire platoon followed him as directed.

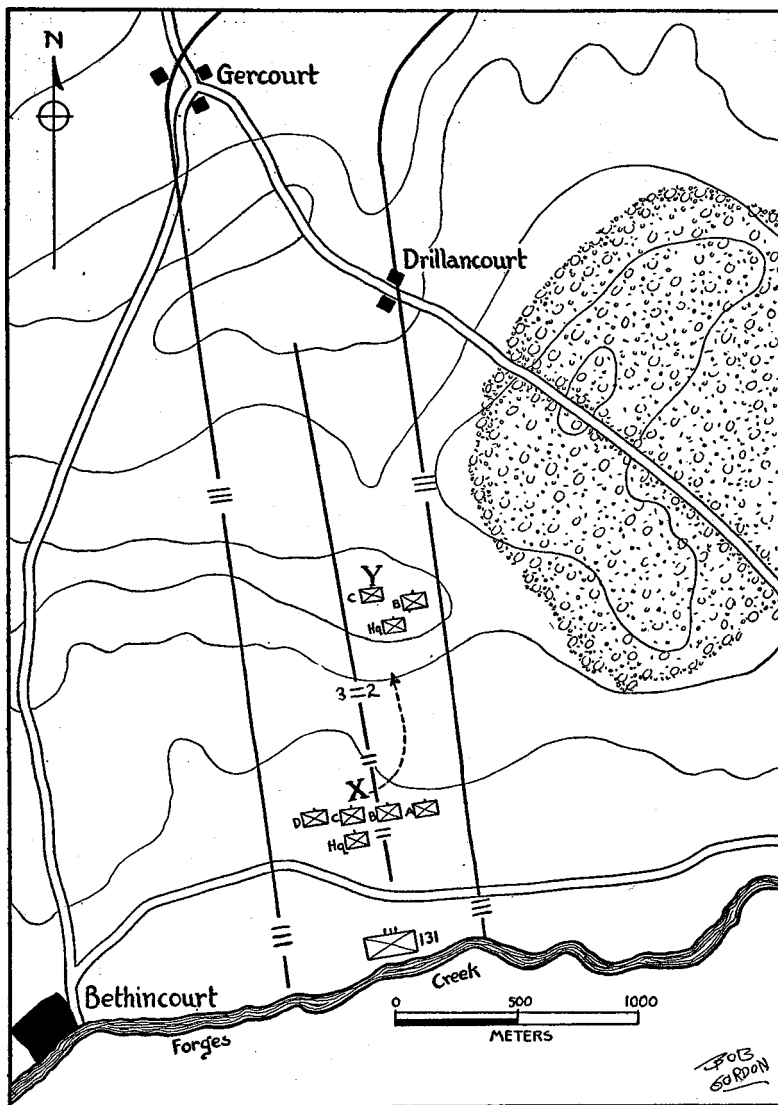
When reorganization had been completed in the ravine, twelve men, all reservists, were missing. There had been a lack of supervision of the movement. If the platoon leader went first, he could not stay behind to supervise the rear elements. But he could designate one or more noncommissioned officers to do this supervising for him. He had tried to do all the commanding himself.

This supervision was all the more important, because the leader did not know the reservists. He did not know what they would do in a crisis. As a result of the leader's failure to consider this state of training of approximately one-fourth of his platoon, as well as the demands of the particular situation, insofar as it affected the question of control, he lost from straggling or skulking twelve members of the platoon. The losses from moral causes were twelve, the losses from physical causes (wounds) were two during the entire approach march.

EXAMPLE II

On September 26, 1918, the 131st U. S. Infantry, in conjunction with adjacent units, was attacking German positions with the mission of gaining the high open ground north of Gercourt. (See Sketch No. 2.) The 1st Battalion, at Point X, constituted the regimental reserve and was to follow the assault battalions at 500 yards.

The formation adopted by the battalion commander was line of companies, in the order from right to left, A-B-C-D, with Battalion Headquarters and attached units in rear. At this time visibility was greatly restricted by fog and smoke.



Example II

Contact patrols informed the battalion commander that the left assault battalion was held up by machine-gun fire and that they had been unable to locate the right assault battalion.

Realizing that both forward battalions were well behind the schedule of advance, the battalion commander of the 1st Battalion decided, on his own initiative, at 8:00 a.m., in order to take advantage of the protection afforded by the rolling artillery barrage which was now some distance ahead, to resume the advance in the zone of the right assault battalion, i.e., 2d Battalion.

No change was made in the disposition of his battalion although it was moving forward now as an assault battalion. While moving forward great difficulties were experienced in maintaining direction because of the smoke and fog, and the deep trenches which traversed the area. Frequent checks by compass were necessary.

About 8:20 a.m. the top of the hill, Point Y, on which the battalion had been advancing was reached. At this time the smoke and fog disappeared—the sun shone brilliantly and visibility became excellent to the front. The terrain could be observed as far as Gercourt and individual Germans could be observed running to the rear. On the right was Company B, on the left Company C, and in the rear the battalion headquarters group. The rest of the battalion had disappeared. No other friendly troops were in sight. Visibility to the rear was still greatly limited by the fog and smoke which clung to the low ground over which the battalion had advanced.

From the personal experience monograph of Captain Carroll M. Gale, who, at the time these events took place, commanded the 1st Battalion 131st Infantry.

DISCUSSION

The battalion entered the combat as regimental reserve. During this period the first requisite for control was a formation as compact as compatible with covered approaches and the effectiveness of hostile long range fire. The more compact the formation, the easier it is to maintain contact with each element. The more dispersed the elements of the command, the more difficult it is to exercise control.

The formation of four companies abreast dispersed the battalion over a wide area. In this situation dispersion was particularly ob-

jectionable because of the poor visibility. In general, formations in column facilitate control; formations in line make control difficult. Premature deployment surrenders, before necessary, a portion of that full control which should be retained to the last minute possible. In the foregoing example the leader, through the formation adopted, multiplied the chances for mistakes and for units getting lost.

When the battalion commander decided to advance as an assault battalion, it would seem that, from the standpoint of control; not more than two front-line companies should have been used. For example, two companies leading, two companies following (square formation) and attached units in rear of the latter, would have facilitated control to a far greater extent than the formation adopted—for companies in line.

With visibility conditions as they were, intervals and distances should have been reduced to the minimum. To facilitate control, the leader should have been with the forward elements, certainly until he decided to push forward as an assault battalion.

The consequences of a faulty formation was that, at the moment the battalion required all of its power, we find its fighting capacity greatly reduced — perhaps as much as 60 per cent. Little of this had been caused by the enemy.

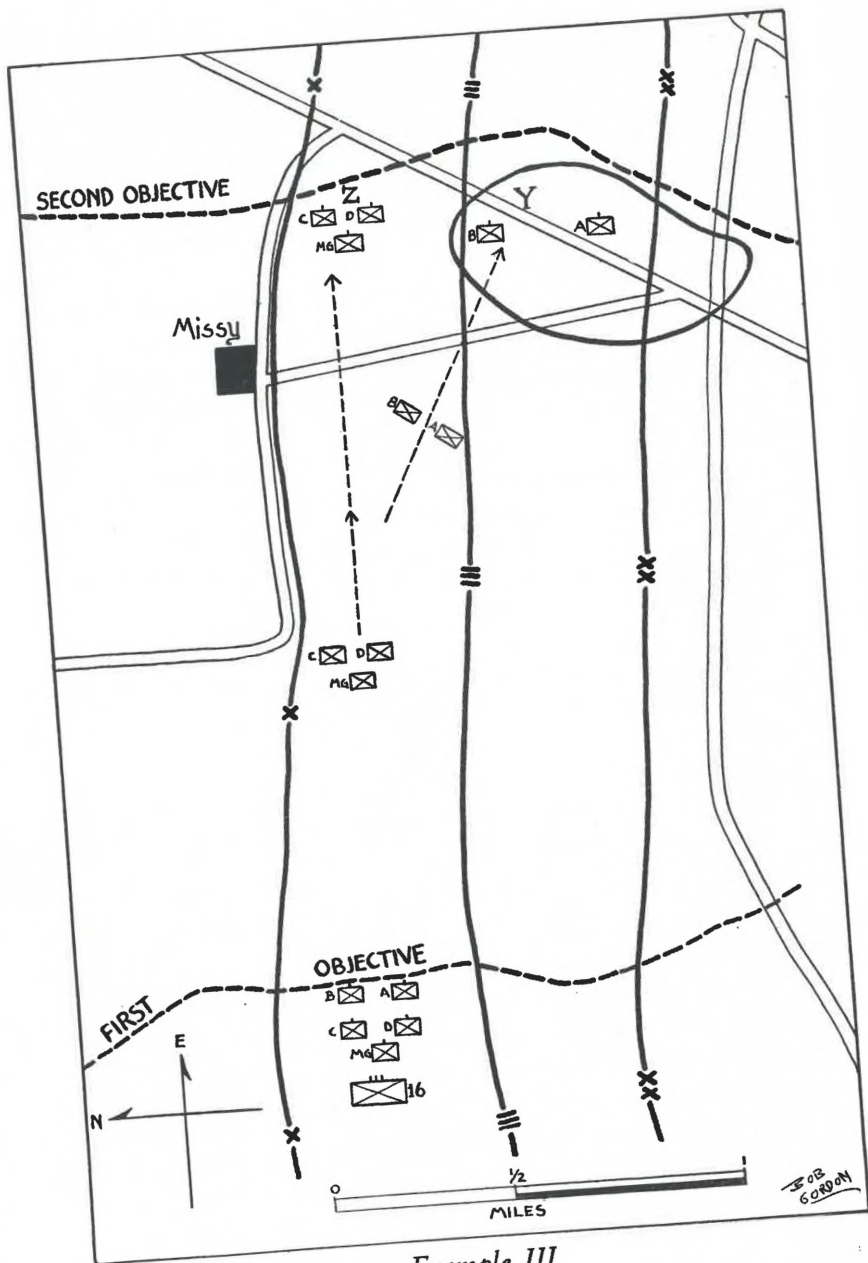
NOTE—This battalion, on the 26th of September, despite the errors discussed above, achieved considerable success, and by aggressive fighting captured a large number of prisoners.

EXAMPLE III

On July 18, 1918, the 16th U. S. Infantry, in column of battalions, was attacking in conjunction with adjacent units to the east.

The 1st Battalion was in assault and had successfully advanced to the first objective, Point X. After reorganizing, the battalion resumed the advance toward the second objective. This advance was hardly started when the battalion commander became a casualty.

At the time, the formation of the battalion was Companies A and B in assault (A on the right), with D and C (D on the right), and an attached machine-gun company following in reserve.



Example III

(See Sketch No. 3.) The company commander of Company B (left assault company) assumed command of the battalion.

He delegated to captain Company C the responsibility of coordinating the movements of the three companies in reserve, while he undertook to do the same for the assault companies. At the same time he continued actively in command of Company B—his own company.

The assault companies, meeting resistance from the right front, veered in that direction. They overcame the hostile resistance, and on arriving at the second objective, they found themselves, at point Y, out of the battalion zone of action. Meanwhile the rest of the battalion had disappeared.

The battalion commander, after some delay, took steps to rectify the error in direction and sent patrols to locate the remainder of the battalion. He found his reserves at Point Z.

This delay, which gave the enemy an opportunity to restore order and strengthen defensive dispositions in the zone, compromised the chances of the battalion for a striking success.

From the personal experience monograph of Major Fred M. Logan, who, at the time these events took place, commanded Company L 16th Infantry.

DISCUSSION

In the incident considered here, the loss of control can be attributed primarily to faulty organization of command. It might be said that the commander committed a double fault in this organization.

In the first place, we find the new battalion commander assigning one officer to command the reserve units, while he himself commands two assault companies. In so doing, he failed to appreciate his new responsibility which was the command of the battalion as a whole. There certainly existed no unity of command in the battalion when the new arrangements took effect. In fact it may be said that the new battalion commander, by reason of the arrangements, inadvertently abdicated control.

It is desirable for purposes of control to have one officer responsible for the movements of the reserve, where the reserve consists of more than one unit. By this arrangement the battalion commander is left free to study the enemy situation, note the progress

of assault units, and *through subordinates* control his battalion. If the reserve consists of only one unit, its commander is, of course, the commander of the reserve. (With our present organization, cases where it will be desirable to appoint an officer to coördinate movements of the reserve will be rare.) In the foregoing case, the designation of an officer to command the reserve was correct, but in this instance the battalion commander disassociated himself to too great a degree from the conduct of his reserve.

The battalion commander should have restricted the reserve commander to coördinating the advance of the reserve *in accordance with the directions of the battalion commander and the progress of assault units*.

Usually reserves of battalions and higher units do not follow assault units at specified distances, but are advanced by bounds from one covered location to another, upon the order of the commander of the whole unit. The unit commander is then aware of the location of the reserve or the place to which it is advancing. This tends to facilitate control. During the World War, however, the tendency was to have reserves follow assault units at certain distances.

Experience has demonstrated that control of a reserve is facilitated by having the reserve commander with the leader of the whole unit. The advantages are patent. The commander of the unit can then ascertain promptly from the reserve commander the location of the reserve. More important still, time, an essential in combat, is gained in getting orders to the reserve commander, and the mechanism for the reserves' employment can be set in motion at once.

The second fault of the battalion commander in his organization of command, consisted in retaining direct control of one of his assault companies—his own company.

One officer cannot directly command his own unit and also control the unit adjacent effectively. If circumstances render the commander of one unit responsible for two units, he should organize his force so that he commands both in the same manner. For the time being he ceases to be the immediate commander of his own unit and should control it through his successor to its immediate command, in the same manner that he controls the other unit.

The position of the battalion commander, suitable for controlling and commanding Company B, could not be the best location from which to control the battalion. By continuing in command of Company B, it was inevitable that the new battalion commander should become so engrossed in the problems of Company B, that he slighted his primary responsibility which was the control of the battalion.

Communication within the battalion broke down and the leader did not know where a large part of his command was located. Let us consider how this might have been avoided. First, the new battalion commander should have designated a new commander for Company B, and then have devoted himself to controlling his battalion. Let us assume that he desires to be well forward, probably in rear of the interval between Companies A and B. Let us assume that he desires to have one officer responsible for the movements of the elements of the reserve, and has selected captain Company C.

Captain Company C makes arrangements in regard to the control of his own company. Now what should be his location? If the reserve is advancing by bounds, he should be with the battalion commander. If, as in the case in question, the reserve has been directed to follow the assault units at a specified distance, the reserve commander may not be able to be constantly with the battalion commander. He will have to control the forward movement. However, his location should be in front of the reserve, and consequently not far from the battalion commander. He should make it a point to keep informed as to the location of the latter at all times and, of course, as to the location of the reserve.

In addition to this proximity of these leaders, what means is there by which the battalion commander can keep in touch with and control subordinate units? He has his staff and the Battalion Headquarters Company. (During the World War, battalions did not have headquarters companies but did have the approximate equivalent as a temporary grouping.) The staff and the headquarters personnel should be so employed that the battalion commander constantly knows the location of his units. Furthermore, each company habitually details runners to Battalion Headquarters, and these runners must keep informed as to the location of their

own units. These agencies are available, and should be used.

Control necessitates a knowledge on the part of the leader, at all times, of the location of all elements of his command, and the ability of the leader to communicate with any element in the minimum length of time.

In maneuvers, with good visibility, no smoke and dust, no casualties, no confusion incident to battle, perfunctory effort often suffices to keep track of the location of subordinate units. It is far different in war, and unless there is constant striving to keep contact, subordinate units will become lost, and control of them rendered impossible.

For efficient control then, in cases where visual liaison is not possible, the battalion commander (or his S-3) should frequently receive from runners, members of the battalion headquarters group or patrols, bits of information such as the following: "Company B went into that wood five minutes ago," or "Company C is just behind the hill."

How about the subordinate units? They must know where the battalion command post is located and keep constantly in touch with it. Units in reserve, like assault units, have runners at the battalion command post, but this may not be enough in battle. In many cases it may be necessary to charge a patrol with keeping the reserve informed of the location of the battalion command post.

As a principle, communication is maintained downward. That is, a battalion is responsible for maintaining communication with its companies. But this does not mean that a company has no obligation to assist and facilitate this maintenance of contact by all the means in its power consistent with its mission. One of the principal duties of leaders in combat is to keep superiors informed of the location and situation of their units.

So we see that, in battle, unless there be a continuing determined effort by both superior and subordinate commanders to keep in touch with each other and to keep each other informed continually of the location of their units, communication is likely to break down and control be lost.

It is not illogical to assume that, in the case under discussion, the battalion commander depended too much for the maintenance

of contact upon the commander of the reserve. On the other hand, the reserve commander is open to criticism for his failure to maintain contact with his battalion commander.

In this example we see the battalion successfully advancing and prospects bright for a farther advance. Speedy resumption of the attack from the second objective was imperative to keep up pressure on the enemy and prevent his reorganization.

The resumption of the attack was delayed through lack of control brought about by faulty organization of command and inadequate liaison arrangements between battalion headquarters and elements of the battalion.

It should be noted that the battalion commander quickly became alive to the danger of the situation and took action to find the separated units and reestablish control. One lesson was enough.

CONCLUSION

Only by means of control can a leader utilize the full power of his unit.

The consequences in each of the three examples quoted were identical—a great reduction in the effective strength of the unit concerned. This reduction was caused by loss of control and not by casualties or pressure from the enemy.

It is clear that a leader cannot strike with his full power unless the elements of his command are available when needed to respond to his will.

The requisites for control in any situation are a matter for most careful calculation. Unless a leader consciously and continually strives for it he will not have control when he needs it.

CHAPTER XIV: COMMAND AND COMMUNICATION

An infantry headquarters must be mobile and must keep close to the troops. From this forward position, communication must be rapid and reliable.

THE infantry leader should have a good view of the terrain, personal observation of the enemy, and be in close touch with his own troops. Thus will he be able to deal promptly with the rapid changes of the situation. He cannot be tied to a remote command post and take effective action in a sudden crisis.

Even though technical means of communication fail, a commander must still be able to exercise his influence on events. The mere fact that such communications function well does not excuse him from intimate contact with his subordinates or from personal observation of the action.

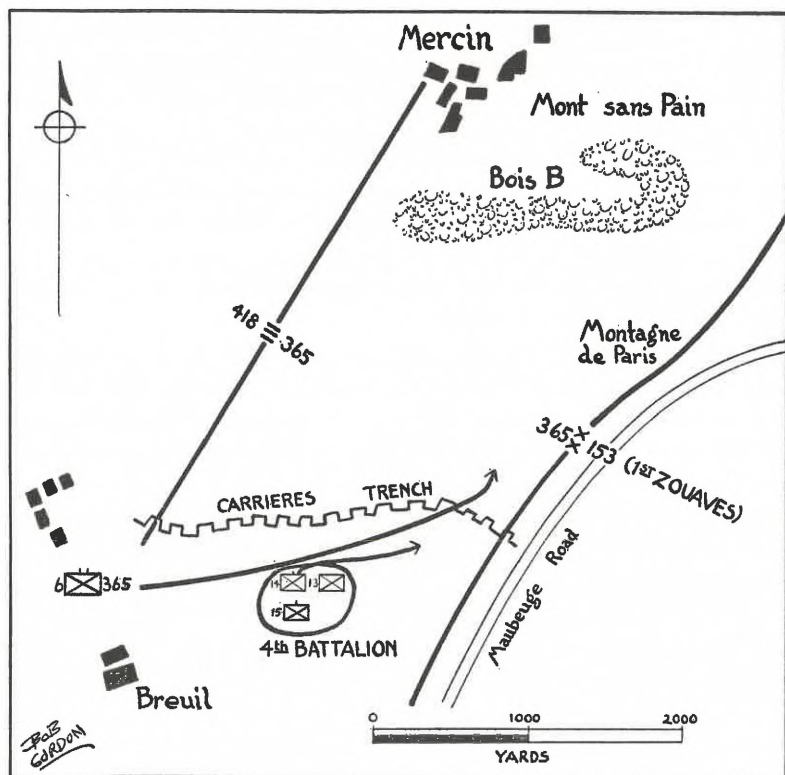
To quote General J. F. C. Fuller, British Army:

"If intercommunication between events in front and ideas behind are not maintained, then two battles will be fought—a mythical headquarters battle and an actual front-line one, in which case the real enemy is to be found in our own headquarters. Whatever doubt exists as regards the lessons of the last war, this is one which cannot be controverted."

EXAMPLE I

On the night of July 18-19, 1918, during the great Aisne-Marne offensive, the 365th French Infantry, which had been in reserve, made a march of some eight kilometers to the front in order to effect a passage of lines and attack at dawn.

The scheme of attack prescribed the 4th and 6th Battalions in assault. The 4th Battalion, with its right resting on and following the Maubeuge Road, was directed to attack toward Montagne de Paris while the 6th Battalion, on the left of the 4th, was ordered to move against Mont Sans Pain. The line of departure was in the



Example I

vicinity of the Carrieres trench. H hour was set at 4:45 a.m. Units were to move out when the first shells of the rolling barrage came down.

At 4:00 a.m. the 4th Battalion reached the locality indicated on the sketch. Here it was discovered that the battalion zone of action was much wider than had been expected. Liaison had still to be established on the right with the 1st Zouaves of the 153d Division and no contact existed with the 6th Battalion on the left.

The battalion commander made a rapid reconnaissance and issued his orders. Company commanders rejoined their units.

As the first shells of the barrage fell, the 6th Battalion suddenly appeared, moving directly across the front of the 4th Battalion. It disappeared in the dust and smoke, attacking along the right

boundary of the regiment. The 14th Company of the 4th Battalion joined the movement and became intermingled with the 6th Battalion and the 1st Zouaves. The barrage began to move forward.

Observing this movement, the battalion commander at once assembled his company commanders and issued the following order:

"We were to attack on the right. Now we attack on the left of the regimental zone. Our objective was Montagne de Paris. Now it is Mont Sans Pain. The 13th Company will cover the entire battalion front. Forward."

The attack of the battalion was fairly successful.

During the morning twenty-two messages dealing with tactical matters were sent or received by the battalion commander, who kept close behind the advance. All of these messages were *carried by runner* and not one was unduly delayed. This figure does not include messages sent to the regimental commander, or those dealing with anything but strictly tactical matters. The total number of all messages handled, including those dealing with losses and supply, is said to have been about seventy-five.

From the article by Major Pamponneau, French Army, on "The Command of Small Units," appearing in the October, 1930, issue of the *Revue D'Infanterie*.

DISCUSSION

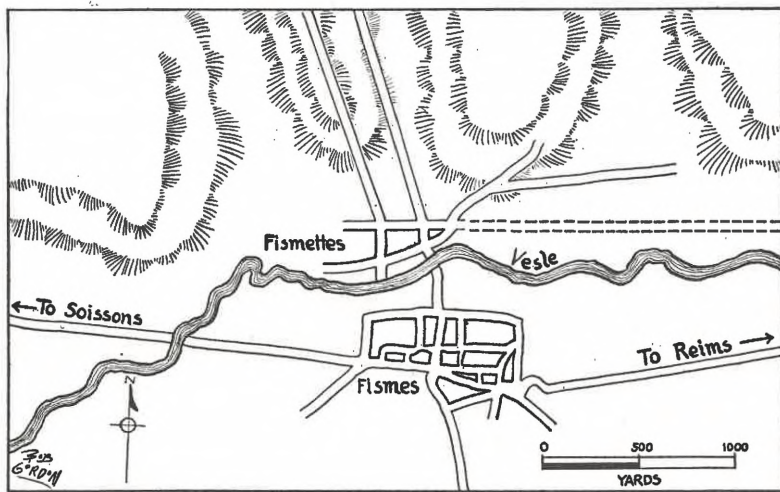
Here we see an instance of a battalion losing its direction in a night march and attacking in the zone of the unit on its right. This action, coming as a complete surprise and at the very moment of the jump-off, presented an unexpected and confused situation to the 4th Battalion. Fortunately, the commander of the 4th Battalion was well forward, in close contact with his units, and was thereby enabled to retrieve the situation. Had he been mulling over maps or orders in some sheltered command post, his entire battalion, instead of one company, would have become intermingled with the 6th Battalion and there would have been no assault in the left half of the regimental zone.

By means of personal contact with his unit commanders, supplemented by excellent communication within the battalion, this leader actually commanded.

In an attack, infantry commanders must be well forward.

EXAMPLE II

The 112th U. S. Infantry, supported by the 1st Battalion 111th Infantry, had, by desperate fighting from August 6 to 8, 1918, succeeded in capturing the little town of Fismes and driving the Germans to the north bank of the Vesle. On the night of August 8th the 111th Infantry relieved the 112th and the 1st Battalion of



Example II

the 111th, which had been attached to the 112th, reverted to its proper unit.

The 111th Infantry had orders to cross the Vesle and continue the attack. The 1st Battalion, being the most available unit, was directed to cross the river and assault Fismettes.

What little had remained of the one bridge across the Vesle had been completely destroyed. Bridging, in the face of the murderous accuracy of the German fire, was considered impossible. The barbed wire entanglements that filled the river rendered wading or swimming out of the question.

Under cover of darkness, the men of Company A gathered rocks and debris from nearby ruins and heaped them in the stream until the pile formed a species of footpath close enough to the opposite bank to be bridged by a stout plank.

Utilizing this slippery and treacherous improvisation, the men of Company A, with other troops of the battalion, filtered across the river and took cover in the ruins along the southern edge of Fismettes. It was 4:15 a.m. before this movement was completed.

It now developed that no one knew the plan. The company commander had been given an oral order. He did not know the line of departure, the time of attack, or, for that matter, just where he was.

Suddenly heavy artillery fire fell to the front, all the American guns appearing to open simultaneously. At this moment a runner appeared and thrust a package into the hands of a platoon leader. A hasty examination disclosed the fact that it contained the division's confirming order for the attack and was intended for the brigade. From this order it was learned that the artillery fire crashing to the front was a barrage in preparation for the attack and was due to raise to the objective at that very moment. The barrage was wasted as far as the 1st Battalion was concerned for this unit was supposed to be 500 yards farther to the front and 300 yards farther to the right of its actual position ready to jump off at the next instant.

The battalion commander had remained in Fismes.

Daybreak found elements of the battalion huddled in Fismettes. The B Company commander, being senior, took command and organized an attack to the north. The attack was broken up by heavy fire at close range.

The Germans gradually filtered back into Fismettes and began firing on the battalion from the rear. Confused house-to-house fighting followed. After a desperate struggle the battalion, though seriously depleted, still held Fismettes.

Several messages were sent to the battalion commander advising him of the situation and requesting reinforcements, ammunition, rations, and help in evacuating the wounded. Runners went back, under fire, over the foot bridge. No word came back. No help was received. The fighting continued.

On August 11, a vigorous German counter attack was repulsed. Immediately thereafter both German and American artillery opened on the town. Frantic messages were sent back to battalion headquarters to raise the barrage or to stop it. But there was no

relief from the American artillery and no response from battalion headquarters. All the Very cartridges and rockets in the battalion were sent up but to no avail. Heavy casualties piled up.

Finally an officer made his way back to the battalion C.P. south of the Vesle. He stated that there were nearly as many men around the C.P. as the battalion had in the front line—among them numerous runners who had carried messages back from Fismettes.

This officer asked why the messages to raise the American barrage had not been complied with. The reply was that the telephone was out and that the information could not be sent to the rear. Upon demand of this officer, the liaison officer started back in person to the artillery to stop its fire.

This battalion commander appears to have been equally out of touch with the regiment. Although numerous detailed messages had been sent back by the troops north of the Vesle and many got through to the battalion C.P., a regimental report, dated August 20, stated that repeated requests sent to the C.P. of the 1st Battalion for information of the condition of the troops in Fismettes brought no definite information up to the afternoon of August 11.

On the morning of the 14th the battalion was relieved.

From the personal experience monograph of Captain Ottman W. Freeborn, Infantry.

DISCUSSION

During the capture and occupation of Fismettes the battalion commander remained in his C.P. south of the Vesle. From such a position he was unable to deal with the many desperate situations that confronted his battalion—situations that demanded immediate action on the spot. In a word, he failed to command.

His only possible excuse for remaining south of the Vesle would be easier communication with the regiment and with the artillery. But even this must be invalidated in view of the fact that neither of these agencies were kept informed of the situation, although the units in Fismettes poured vital information into the battalion C.P.

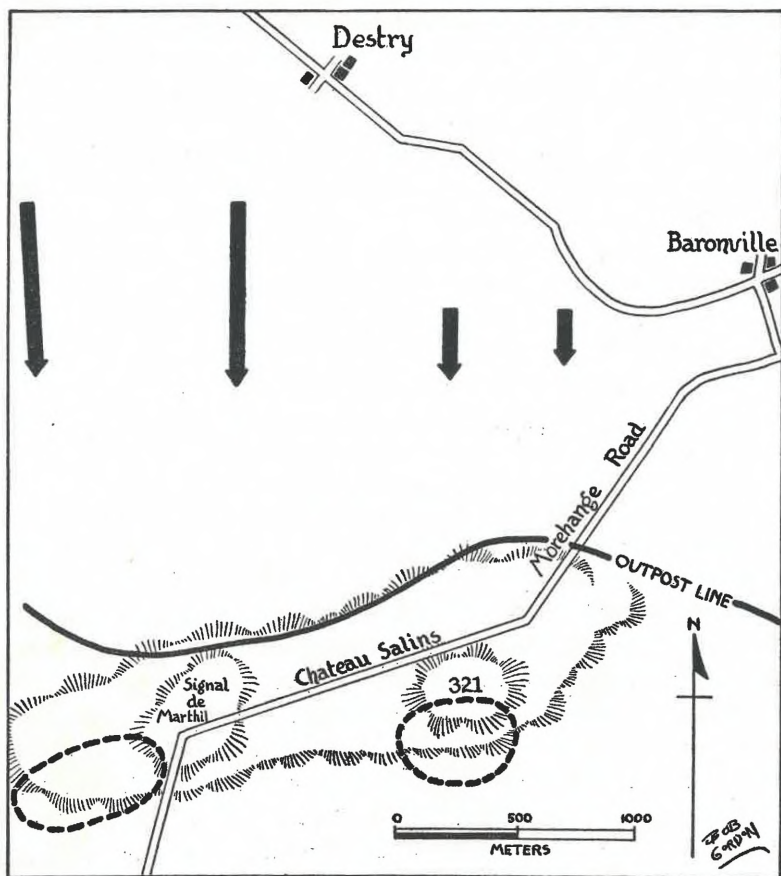
Because the wire system failed, the battalion commander as-

sumed that he was unable to communicate with either the artillery or higher authority.

So long as anyone, including the commander, can walk, crawl, or roll, an infantry unit is not "out of communication."

EXAMPLE III

After pushing forward all day August 19, 1914, in pursuit of a retiring enemy, the 153d French Infantry, part of a larger force, reached the heights of Signal de Marthil and Hill 321. During the



Example III

day heavy artillery fire had been received from the vicinity of Baronville, but the region north of Signal de Marthil seemed free of the enemy.

Outposts were established on the north slopes of the heights between Hill 321 and Signal de Marthil. As the advance was to be resumed the following day, no elaborate communications were established between the observation elements of the outpost and the remainder of the regiment. There was no wire, no radio, and the outposts were not provided with pyrotechnics.

At dawn on the 20th, the battalions moved forward and assembled on the south slopes of the hills, awaiting orders. Breakfast was being prepared. Suddenly a hail of shells fell on the French position. Men ran for the nearest cover. No message came from the outpost. It was assumed, therefore, that the Germans were laying down a counterpreparation to prevent a French advance. Fifteen to twenty minutes passed. A rumor spread:

"The enemy is attacking."

The battalions received orders to deploy on the crests to their front. Scarcely had the leading platoons climbed the slope when they encountered a strong hostile attack. The French left was enveloped. The Signal de Marthil fell. The undeployed battalions, still on the northern slope, were taken in flank by heavy fire. The French vainly strove to establish a firing line but were so confused that they did not even know in which direction to deploy. They were driven back in disorder.

The French outguards saw the Germans debouch from the heights to the south and to the west of Destry, but messages sent to the rear did not reach the French regimental and battalion commanders until the Germans were almost on them.

From the article in the *Revue D'Infanterie*, April, 1927, by Captain Laffargue, French Army.

DISCUSSION

The German attack progressed 1,500 to 2,000 yards in full view of the French outguards and reached the Chateau Salins—Morange Road before the French battalions received word of it. The Germans appear to have covered this distance in about 20 minutes.

The French battalions were only 400 yards or so from the crests.

The commanders were among their troops. Their desire could be expressed simply: "Deploy on hill at once." Yet the Germans got there first. Regardless of the fact that the French appear to have been too confident to take warning from the artillery fire, the striking thing is that the German attack progressed 2,000 yards before messages from the outpost could travel a third of that distance and be acted upon.

In such a situation, the value of visual means of communication must be apparent. Pyrotechnics or projectors, using a prearranged code to express simple, important ideas such as "enemy attacking," would have met the situation.

The disaster to this regiment must be attributed, in large part, to inadequate communications.

EXAMPLE IV

On October 6, 1918, the 3d Battalion 26th Infantry was attacking Hill 272. Two companies, K in assault and M in support, advancing from the southeast, had reached the slopes of Hill 272, which was still strongly held by the Germans. Company I, extending along the entire battalion front south of the hill, assisted the attack by fire. Some guns of Company A, 3d Machine-Gun Battalion, and elements of a battalion of the 28th Infantry on the left, added their fire to the effort. Company L, with two machine guns, was sent to the ravine northeast of Ferme D'Arietal to cover the right flank and rear of the attack. It was realized that this was a danger point since the 1st Division, of which the 26th Infantry formed a part, appeared to be farther advanced than the troops on its right. Elements of the 7th Field Artillery supported the attack and a system of rocket signals had been arranged with them in case telephone communication should break down. The support battalion of the 26th Infantry was located in the vicinity of Hill 212.

About 3:00 p.m. the assault battalion commander was south of the left flank of the leading elements of M Company. He could see Hill 272, his own advance elements, and Company I. He also had a fair view to the northeast.

An extension of the telephone line from the battalion C.P. was within 400 yards of the battalion commander's position. Casualties

vancing down the valley in close formation. They seemed to be in force. A forward movement of the widely deployed Company I, in the face of the fire from Hill 272, was not believed feasible. Moreover, any movement by this company would take time.

The battalion commander took the following action:

He sent an oral message by runner to Company K directing it to hold its ground and to continue to face Hill 272.

He sent two runners by different routes to the end of the telephone line with written messages to be telephoned to the support battalion asking for machine gun and artillery support. (It was routine for the support battalion to pass such messages on.) The runners were then to find the artillery liaison officer, inform him of the situation and ask for Fire No. 9, data for which had been prepared. The liaison officer was known to be observing artillery fire from a tree in the woods southeast of Hill 272. He had a telephone line to the artillery.

Meanwhile, with the aid of three veteran noncommissioned officers of Company M, the battalion commander succeeded in halting and assembling some 40 of the retreating troops.

He then took charge of these 40 men, moved through the woods and counterattacked the advancing Germans on their right flank.

The runners sent with the written message found that the officer left at the telephone extension had been killed, but they telephoned the message properly and promptly. They then found the liaison officer and delivered their message to him.

The German movement had also been noted by the regimental C.P. As a result of the prompt transmission of information, the machine guns of the support battalion on Hill 212 placed accurate, indirect fire on the valley. The artillery also brought down its fire promptly.

These fires, in conjunction with the efforts of Companies L and M, and the fire of the two machine guns which were covering the right flank, broke the hostile attack. The Germans suffered heavy losses and withdrew in confusion.

From the personal experience monograph and supplementary statements of Major Lyman S. Frasier, Infantry, who at the time these events occurred commanded the 3d Battalion 26th Infantry.

DISCUSSION

This situation, which developed so suddenly, appeared extremely serious to the battalion commander. Men from two companies had started to run. A third company had started to withdraw. Intervention by the battalion commander was imperative.

Had he not been well forward where he could see the enemy, see his own troops, and exert his personal influence, he would have been helpless. Information would not have reached him in time.

Thanks to excellent communications, he was able to make his wants known to the regiment and to the artillery. The telephones were working and he was within 400 yards of one. Moreover, the artillery liaison officer, while not with the battalion commander, was not far distant, and he had a phone connected with the artillery. The battalion commander knew just where this liaison officer was. So did the runners. They knew where they were to go, and in a crisis, they telephoned important messages promptly and properly.

This situation could not have been fully met if preparations had not been made for such an eventuality. The artillery and the machine guns were prepared to place fire in the valley. On receipt of a short, simple message, they did so and did so promptly.

The following from the monograph of Major Frasier will give an indication of the methods used in the 1st Division, by this time a veteran organization, to insure communication in the Meuse-Argonne offensive:

"Battalion commanders had been informed before the battle that their chief duty was to advance but that next to this their most important function would be to keep in touch with regimental headquarters. If these two things were done, the ground gained would undoubtedly be held.

"It was understood that the assault battalion was responsible for the wire line as far back as the support battalion. The support battalion would maintain the line to the regimental C.P. The telephone section of the regimental signal detachment would assist in the supply and maintenance of the entire telephone system.

"The wire scheme generally employed was, at that time, called a ladder line. One line was laid about ten yards from the other, or at any distance which would permit a lineman on patrol to ob-

serve both lines for breaks. At irregular intervals these wires were bridged.

"The linemen detailed to bridge the wires carried test sets. In order to keep the system working, men were detailed as line guards and patrols. At all times, both day and night, there would be one man patrolling each 500 yards of wire. These guards would meet.

"Since no additional mention will be made of the system of communication, other than by runners and mounted messengers, it is proper to state here that the cost to the 3d Battalion of maintaining telephone communication during the second phase of the Meuse-Argonne offensive was 74 men. These men were killed or wounded on the duty mentioned.

"Many, of course, had to be detailed from the rifle companies. Had we not had communication at all times, the number of casualties which could have been charged to the lack of it might well have been seven hundred and forty instead of 74.

"Runners were depended upon entirely for communication between the companies and between companies and the battalion command post. Runners and mounted messengers were depended upon for communication, other than by telephone, with regimental headquarters.

"An important message would be sent by at least two runners, one leaving some little time before the other. It was also found advisable to place some distinguishing mark upon runners. When no distinguishing marks were worn, it was required that they carry their messages pinned on their blouses in a conspicuous place."

CONCLUSION

In open warfare a command post within a regiment is seldom more than a message center.

In order to exercise control, battalion commanders should be well forward. In their field training, battalions should practice methods of maintaining communication between the commander's forward position and his C.P. Frequently an extension of the telephone system will be the simplest solution.

As a rule, the battalion commander should move forward along the announced axis of signal communication. If, for any reason, he leaves this axis, a runner should be left behind who knows where he

can be located. The command post personnel should always be able to find the commander when he is forward along the line.

Runners must be relied upon for communication within the battalion. Unless this messenger service is carefully planned and its personnel of high quality and well trained, it will not be able to survive the tests of the battlefield.

To fight his unit efficiently, a leader must be able to impart his decisions to his subordinates quickly and correctly. To insure prompt, intelligent assistance from the higher echelons, he must be able to keep them informed of the situation.

In brief, without effective communications, the efforts of infantry in battle will be aimless and uncoordinated.

CHAPTER XV: ACTION AND MORALE

Action, physical and mental, is an efficacious antidote for battlefield nervousness.

A SOLDIER, pinned to the ground by hostile fire, with no form of activity to divert his thought from the whistling flails of lead that lash the ground about him, soon develops an overwhelming sense of inferiority. He feels alone and deserted. He feels unable to protect himself. With nothing to do but wait and with nothing to think about but the immediate danger that surrounds him, his nerves rapidly reach the breaking point. Inactivity, therefore, constitutes a most serious danger to his morale.

On the other hand, by diverting the attention of the soldier through some simple expedient or by requiring him to perform some physical labor, the nervous tension of the battlefield may be materially reduced. The leader, by thinking objectively himself, and by causing his men to perform tasks involving thought and movement, may successfully combat this intense mental strain of battle. So too, will simple, matter-of-fact actions by a commander tend to instil in the men a sense of confidence and security.

EXAMPLE I

On August 22, 1914, the 6th Company, 116th French Infantry, attacked, over open ground, toward the town of Maissin. Although the company advanced under hostile machine-gun fire, it saw nothing at which it might fire. By rushes of small groups it reached a crest near Maissin.

On this crest was a wheat field in which the company was held up by hostile fire. The instant a man lifted his head bullets from an unseen enemy cracked through the field, cutting off the stalks of wheat.

The 6th Company was well ahead of the other French units. It was in its first fight and the men were palpably nervous. Although they had gone through much hostile fire they had not seen a single

target at which they might shoot. The hostile fire had now grown extremely heavy but still no one could see the enemy or even tell from where the fire was coming. The situation on the crest was tense.

The company commander finally saw one or two Germans near the edge of Maissin. He promptly ordered his company to open fire on the outskirts of the town, *each man to fire six cartridges*.

A soldier near the company commander fired his six shots, aiming carefully each time. Then, with the empty cartridge cases in his hand he turned and asked:

"Captain, shall we save the empties or throw them away?"

The crisis had passed and the company was, once more, well under control. Their attack succeeded.

From the *Battle of Ardennes* by Major Pugens, French Army.

DISCUSSION

The captain saw that his men were becoming dangerously tense. They were in their first fight. They had been advancing under hostile fire and now they were pinned to the ground with no good target before them.

The company commander wished to give his men something to do, something that would occupy their minds. He did not want them to dig in for that night stop the attack and furthermore was at variance with the French ideas of 1914. The one or two Germans seen near Maissin did not present a target that warranted the expenditure of much ammunition. Therefore, the company commander did not permit his men to fire at will. Instead, to settle the nerves, he ordered them to fire by counted cartridges. This gave each man a task on which he had to focus his attention and at the same time reasserted the control of the leader.

The incident of the soldier and the empty cases shows that the company commander succeeded in his aim. Major Pugens comments on it as showing a good "combat reflex." Troops under fire for the first time are particularly sensitive to impressions.

EXAMPLE II

The following discussion is taken from an address delivered by Captain Adolph von Schell of the German Army.

In August, 1916, the Great Russian offensive under General Brusilov had thrown the Austrians far to the rear. German troops were brought up to help the Austrians. They approached the front in rapid marches.

One night some German units moved up close to the front as a reserve. As they were unfamiliar with the terrain, Austrian non-commissioned officers were used as guides. One of these conducted a German company to the front under cover of darkness. This company was halted in a large shed where the men slept until morning.

When dawn broke the company commander found that this shed was located about 200 meters from an Austrian battery and therefore was very likely to suffer from Russian artillery fire directed at the battery. At this point the company commander saw a Russian observation balloon. Due to the general situation he felt it imperative that his men remain concealed in the shed so long as the balloon remained up.

Almost immediately the Russians began to shell the Austrian battery. One out of every three or four shells fell short, striking near the shed. The company commander noticed that his men were becoming increasingly nervous. They were required to remain in this dangerous and exposed locality with nothing to do.

Some of them began making excuses of one sort or another, trying to obtain permission to leave the shed. The captain did not allow this. The nervous excitement grew more intense. Not a word was spoken. The company commander felt that some action was absolutely necessary.

He called the company barber, sat down with his back to the Russian fire, and directed the barber to cut his hair. He had the most unpleasant haircut of his life. Every time a shell whistled over the shed, the company commander ducked his head and the barber pulled out a few hairs.

The effect on the men, however, was splendid. They felt that if their company commander could sit down quietly and let his hair be cut that the situation could not be as bad as they had imagined. Soon conversation began, a few jokes were cracked and some of the men began to play cards. After that no one paid any further attention to the shells. Even when two men were wounded

by this shell fire, the morale of the company was not noticeably affected.

In discussing this, and other incidents of a similar nature, Captain von Schell stresses the importance of causing the individual soldier to do something. When the men began to play cards and crack jokes the crisis was past.

"As soon as the soldiers do something, each becomes ruler of the situation," said Captain von Schell. "If the men have been on the defensive for a long time send out patrols, even if there be no special reason for patrols. The patrols give the men a feeling of self-confidence and superiority. Inactivity and waiting are trying and constitute a strong psychological attack on nerves and morale."

EXAMPLE III

On August 22, 1914, the French 7th Division advancing in route column, near Ette, suddenly encountered Germans advancing from the north and the east. The French had not expected any serious engagement that day.

A dense fog covered the ground as combat was enjoined. The 11th Company, 103d French Infantry, one of the leading elements of the division, was ordered to deploy. In the murk and obscurity of the fog confusion reigned. Units became intermingled and disorganized. Opposing troops became engaged in a fire fight at close range. Nothing was known of the situation. The only thing the French knew was that everywhere they went they met Germans.

As the fog began to lift the 11th Company could find no other French troops nearby. Bullets came from several directions at the same time, but no Germans could be seen. They seemed to have vanished in thin air. This company, in its first fight, felt isolated. Things had gone far differently than had been expected.

The company commander tried to determine his objectives and locate targets while death struck around him. His company had already suffered appreciable losses, including several platoon and section leaders. Finally, he noted a wood about 1000 yards away. That might harbor some Germans. He ordered his company to open fire against it.

He did not expect any physical effect from this long-range fire

directed against the edge of a wood that might not even hold any of the enemy. *He opened fire only to quiet the nerves of his men.*

A little later other French troops deployed along a crest which was near the 11th Company. Shortly afterward heavy artillery fire struck these French troops from the rear, while from the front they received heavy rifle and machine-gun fire. They withdrew, abandoning the crest. Although the 11th Company Commander saw what appeared to be a withdrawal, he, himself, had received no orders and accordingly held his company in position near the crest.

A bit later two German battalions assaulted this abandoned crest. Their attack broke down completely, due to the flanking fire of the 11th Company from one side and of two stray machine guns from the other.

The repulse of this attack probably exerted a decisive influence on the fight, for it kept a German brigade from taking a large part of the French 7th Division in flank and rear at a critical moment.

From *Ethe* by Lieutenant Colonel Grasset, French Army.

DISCUSSION

The unexpected situation, which suddenly developed, apparently upset the men of the 11th Company. The company commander, wishing to occupy their minds, ordered fire against a distant wood. Colonel Grasset emphasizes the fact that the principal purpose of this fire was the moral effect it would have on the men. He does not specifically set forth the result of this action on the men but the events that followed speak eloquently.

This very company, whose nerves had required soothing, remained to face and stop an attack by two German battalions, although the rest of the French had withdrawn. In so doing played a decisive role in the fight of the 7th Division.

EXAMPLE V

At 4:35 a.m. July 18, 1918, Company D, 16th Infantry, jumped off in the great Aisne-Marne offensive. At the outset it was a support company of an assault battalion. A few minutes before the scheduled hour of attack the Germans opened a violent bombardment that appeared to be directed at Company D. The troops were

tired. They had undergone a difficult and fatiguing march to the front. The company commander and his men, facing this hostile bombardment, felt that the outlook was far from encouraging. Suddenly the American barrage opened!

"This American barrage was the most inspiring incident of five days' fighting" says the company commander. "We who had been depressed and who had dreaded the formation of the company under the German barrage now jumped up and hurried to our places. It was a great relief to have something to do—the officers to supervise the formation and the men to get into their proper places.

"Many had been killed and wounded by the hostile barrage. Several squads had to be reorganized while shells were still falling in the immediate vicinity.

"During the first part of the advance I was surprised to see every man smoking a cigarette. Then I heard someone call out, 'over the top with a cigarette.' I remembered, then, that the company had been issued a tobacco ration the previous evening and that I had cautioned them all to save one smoke, so each man could start 'over the top with a cigarette.' This gave the men something to think about during the first few minutes. The badinage which arose relative to the comparative worth of several popular brands of cigarettes, while still under the barrage, proved that the idea was not without merit."

The advance continued. Losses in the company became increasingly heavy from artillery and long-range machine-gun fire.

"I noticed, after several men of the company had been blown up by shells, that a spirit of uneasiness became dominant. Men stopped at the sinister whine of an approaching shell; ranks began to sag; the threat of the shells was uppermost in the minds of the troops.

"To divert their attention I decided to try some disciplinary measures of the drill-field. I moved from front to rear and by dint of vigorous whistle-blowing and considerable yelling, dressed up the lines. Whenever a man strayed out of formation I called to the platoon or section leader to dress his outfit. It was not long before each man was paying more attention to his place in line than to machine-gun bullets or shell fire. I noticed a good deal of talk-

ing among the men, accompanied by puzzled glances in my direction. I overheard such remarks as 'Must think we're on the drill field,' 'What the hell's eating him?' etc.

"The company moved forward without faltering, even when a shell landed squarely on a column composed of a lieutenant and his platoon headquarters."

The attack progressed successfully and later Company D became engaged as an assault company. On July 19 the attack was continued. On this day, as Company D approached a slight rise northeast of Chaudun Farm, it encountered machine-gun fire from front and flanks.

"The machine-gun fire seemed to be coming from the wheat field that crowned the rise," continues the company commander, "so I passed the word along the first line that the leading platoons were to charge toward the top of the hill. The orders miscarried somewhat for, as I jumped up, the entire company advanced. The machine-gun fire did not vary in its intensity and few men fell. The support platoons, advancing in squad columns, had the misfortune, however, to have a shell land on a column in which a platoon leader was marching.

"The charge, which had started at a run, soon slowed down to a jog due to the difficulty of climbing the incline over the slippery grass. The line was walking when the crest was reached. Still we heard the machine guns firing. They were farther to the front. We had now come under observation and a few burst in our ranks convinced me that our charge had been premature."

Now that the company was unable to advance the company commander found that both he and the men were becoming intensely nervous. He, thereupon, directed one platoon to dig in near the crest of the hill and took the remainder of the company about 100 yards to the rear and ordered them to dig in there. "I found it was a great relief to be busy," he comments "so my striker and I dug a shelter in a new shell hole, I worked until I was wet with perspiration. The extreme nervousness which had seized me, after our capture of the hill top, then left me.

"Shell fire continued on our position and casualties were numerous, although the company was now dug in below the surface of the ground. I found in my inspection trips, however, that the

exercise had calmed the men to such an extent that they were joking about which platoon would receive the next enemy shell."

From the personal experience monograph of Major Leonard R. Boyd, Infantry, who, at the time, commanded Company D, 16th Infantry.

DISCUSSION

The incidents described in this example deal with measures taken by a company commander to reassure his men and quiet their nervous tenseness during critical periods of an action.

In each instance, the remedy consisted of giving the men something to do and something other than their troubles and dangers, to think about. It is to be noted that at the time the company commander required his men to dress their lines in parade-ground fashion, the company was in support and not in assault. In this case the serious drawbacks, that usually accompany rigidly-dressed lines and columns, applied only to a limited extent. The company commander here considered that the moral effect on his men far outweighed the disadvantages inherent in an extreme regularity of formation.

"The company was receiving artillery fire and only long-range machine-gun fire," says Major Boyd. "The psychological effect was as follows: The mental effort of the men to keep in alignment, while under heavy fire, and their secret amusement at their leader's idiosyncracies, made the element of personal danger one of secondary importance."

Major Boyd comments on the ineffectiveness of the rifle fire during the first few hours of the attack. Owing to excitement many men failed to set their sights, others set their sights and never used them, while still others shut both eyes and jerked the trigger. He noted that later in the action the rifle fire was much steadier and far more effective.

"Movement," he states, "applied to individuals, will frequently afford a tense and apprehensive man a physical means of letting off steam. If the man is required to perform heavy labor, personal danger is readily forgotten. However, when shells are exploding near an unoccupied soldier he is unable to push back waves of fear. He crouches and waits and for him the battle will probably degenerate into an unending series of 'waits.'"

CONCLUSION

Until recently, armies fought in comparatively close order. Masses were held together by drill and by discipline. The enemy was in plain view. Now we usually struggle against an enemy whom we cannot see. We no longer fight in masses but in small groups—often as individuals. Therefore the psychological reaction of the individual becomes increasingly important.

In war, the soldier is the instrument with which leaders must work. They must learn to play on his emotions—his loyalty, his courage, his vanity, his sense of humor, his esprit de corps, his weakness, his strength, his confidence, his trust—. Although in the heat of battle there is no longer time to prepare soldiers for the impressions of war, there are, however, two simple means by which a leader may lessen tension:

He can do something himself that will give the men a feeling of security, or

He can require his men to do something that will necessitate activity and attention.

CHAPTER XVI: NEARING THE ENEMY

"On entry into action, a great advantage accrues to that side which first succeeds in making effective preparation for battle."—German Regulations.

AS WE NEAR the enemy, the infantry deploys and advances, protected by part of the artillery. "At the outset," so the German Regulations state, "the first endeavor should be to lay down the law to the enemy, thereby securing one's own freedom of action. The best means for obtaining this result is the early development of the main body in the direction in which the decision is sought, with a view to timely deployment."

Early and effective entry of the artillery is of the greatest importance. To quote the German regulations further: "*The artillery of the main body* first gives the necessary stability to the front which is being formed."

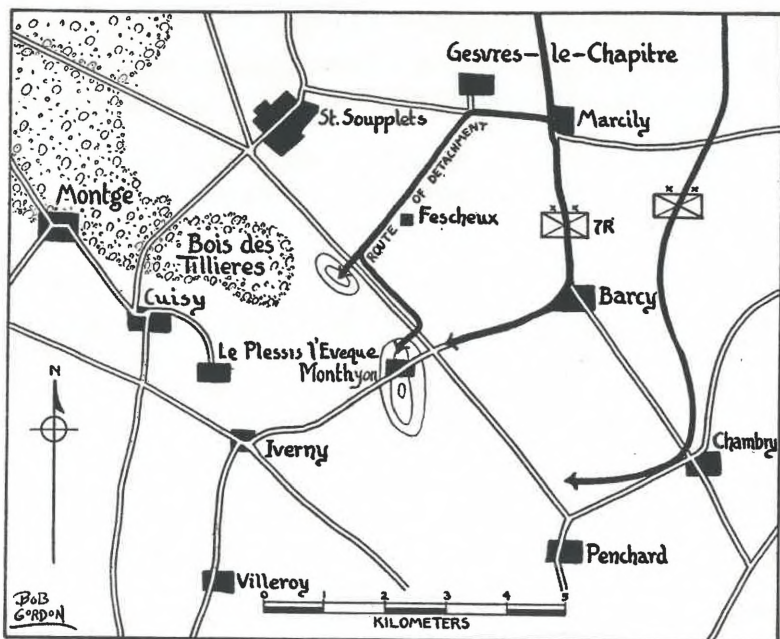
It is not necessary to await the actual clash of leading elements before taking action. On the contrary, when contact is imminent, artillery and infantry supporting weapons should be deployed in order to protect the forward movement of infantry elements in rear. The infantry (except those elements well in rear) should leave the road and, as a rule, continue its advance by bounds.

During this advance, active reconnaissance must locate the enemy. As the enemy is neared the infantry assumes a formation preparatory to combat. The nearer it gets, the more closely this formation resembles a complete deployment. From such a formation a coördinated attack may be launched with great rapidity.

Clinging to the road, when contact is imminent, tends to prevent the gaining of surprise and invites punishment by hostile artillery. It may easily lead to a piecemeal engagement.

EXAMPLE I

On September 5, 1914, the IV German Reserve Corps (7th and 22d Reserve Divisions) echeloned to the right rear of the First



Example 1.

German Army, had the mission of protecting the flank and rear of this army from the west, the dangerous direction of Paris. The IV Reserve Corps marched south in two columns with cavalry on its west flank.

Early on September 5, the 1st Battalion, 27th Reserve Regiment, and the 2d Battalion, 7th Artillery, were detached from the 7th Reserve Division and ordered to march west to support the cavalry. Suspicious French activity from the direction of Paris had been reported.

About noon this small force, marching on the Marcilly-St. Souplets Road, neared Gesvres-le-Chapitre. Here it was overtaken by a messenger.

"The French are coming from the west. The IV Reserve Corps changes direction to the west. The 7th Reserve Division moves on Monthyon. Turn southwest and rejoin it at Monthyon." Such was the gist of the order brought by the messenger.

The artillery battalion, with the exception of one platoon, which

remained with the 1st Battalion 27th Reserve Regiment, moved on Monthyon at an increased gait, followed by the infantry. Near Fescheux Farm a second order reached the infantry battalion commander:

"Move to Cuisy by roads through the Bois des Tillieres. The cavalry reports the French are within a few miles."

The infantry battalion commander had no view to the west. With his staff, he immediately galloped forward to the hill a mile northwest of Monthyon. From there observation was excellent. To his surprise he saw a French force, that he estimated as a brigade, assembled near Plessis-L'Eveque. To the north he saw a line of French skirmishers moving east between the north edge of the Bois des Tillieres and the village of St. Soupplets.

The battalion commander at once dashed back to his command and ordered his platoon of artillery to trot ahead and occupy the hill he had just left. He then deployed his battalion, sending one company to face the skirmish line north of the wood and one to face the wood itself. Having but three companies, he held the third in reserve. The artillery platoon moved out at a trot and, after climbing the steep hill, went into position at the gallop. A moment later, at about 1:00 p.m., the first cannon shots of the Battle of the Ourcq and the Battle of the Marne rang out.

Meanwhile, as the 2d Battalion, 7th Artillery, approached the hill of Monthyon it encountered a German cavalry officer.

"The French are just over there a short distance," the officer said, and briefly explained the situation. The battalion at once went into position on the northern slopes of Monthyon Hill and opened with a burst of surprise fire.

Although the French, in this portion of the terrain, were partially deployed, the artillery's early entry into action effectively covered the advance of the German 7th Reserve Division, whose units were thrown into battle as fast as they arrived. Despite the numerical superiority of the French, the tactical success on this day seems to have been gained by the Germans. The French near St. Soupplets who threatened to envelop the German north flank were unable to advance.

From the *First German Army in the Battle of the Ourcq* by Lieutenant Colonel Koeltz, French Army.

DISCUSSION

A successful French advance southeast from St. Soupplets, taking the IV Reserve Corps in flank, might well have had far reaching results. Had the German IV Reserve Corps been broken on September 5, the Battle of the Marne might have been decisive tactically as well as strategically.

The check of the French movement near St. Soupplets may be attributed, in part, to the early engagement of the German artillery. This effectively covered the deployment of the larger German elements on the north flank.

The action of the one platoon that trotted ahead of the German Infantry, and went into position on the crest a mile northwest of Monthyon, was the result of a definite order. It was a bold movement and provides an extreme case. The action of the rest of the artillery battalion was accidental. Nevertheless, it clearly indicates the importance of the early deployment and early commitment of artillery in a meeting engagement.

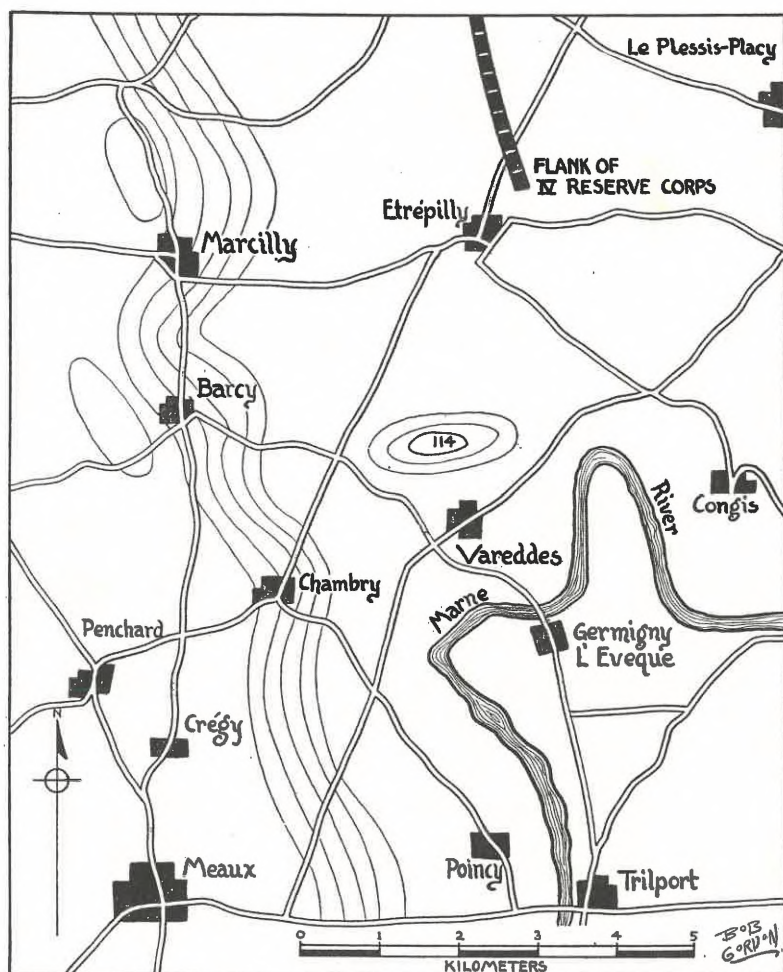
Undoubtedly, with the wire equipment of to-day, the battery positions would not be so far advanced. The observers, rather than the guns, would occupy the hills.

The action of the infantry battalion commander also affords one more bit of testimony as to the value of personal reconnaissance.

EXAMPLE II

On September 5, 1914, the IV German Reserve Corps encountered the Sixth French Army, which was moving eastward, from Paris, to strike the flank and rear of the First German Army (Von Kluck). The IV Reserve Corps was charged with the protection of this threatened flank. However, after a heavy engagement it withdrew a short distance under cover of darkness. On September 6, the II German Corps, located south of the Marne, was rushed north to the assistance of the IV Reserve Corps, both of whose flanks were threatened.

The 3d German Division, part of the II Corps, marched north in one column. It had been alerted about 1:00 a.m. Ahead of the division moved a cavalry regiment, the 3d Dragoons, followed by the corps commander, General Von Linsingen, in his automobile. The commander of the 3d Artillery Brigade and his staff followed.



Example II

At 5:00 a.m., from a height near Trilport, these officers saw five strong French columns moving eastward, north of the Marne. Evidently the IV Reserve Corps would soon be attacked by very superior forces.

General von Linsingen ordered all the artillery of the 3d Division to pass the infantry and get into action quickly in order to assist the IV Corps and cover the crossing and debouchment of the 3d

Division beyond the Marne. The 3d Dragoons were directed to cover the batteries.

The artillery (three battalions of light artillery and one battalion of howitzers from the corps artillery), received this order about 6:00 a.m. and moved forward at a trot, passing the infantry's leading elements. The artillery marched in the following order: 1st Battalion 38th, 2d Battalion 38th, 1st Battalion 2d, and a battalion of 150-mm. howitzers.

The artillery brigade commander, General von Stamford, preceded the column to reconnoiter. About 8:30 a.m. from Hill 114, northeast of Varedes, he obtained a good view. French infantry was already crossing the crests of Marcilly, Barcy, and Chambry. He saw no friendly infantry, anywhere on the plateau east of Barcy, (actually there were a few German companies near Varedes).

General von Stamford ordered his artillery into position at once. The 38th Artillery and the battalion of howitzers went into position near Hill 114, and the 1st Battalion 2d Artillery near Germigny. By 9:00 a.m. three battalions had opened fire. The remaining battalion was in action by 9:50 a.m.

At about 9:30 a.m. the fire of the German artillery stopped the advance guard of a French brigade near Barcy and delayed and hindered the advance of two other brigades. Thereafter it intervened with particular effectiveness near Chambry.

About 10:00 a.m. the German 5th Infantry Brigade crossed the Marne and went into position on the plateau just north of Varedes. The 6th Brigade reached the crest west of Varedes about noon.

The French attacks, starting about 12:45 p.m. and continuing throughout the afternoon, were completely repulsed. The south flank of the IV Reserve Corps was secured.

From the *First German Army in the Battle of the Ourcq* by Lieutenant Colonel Koeltz, French Army, and from the articles on Monthyon in the *Revue Militaire Francaise* in 1930 by Captain Michel, French Army.

DISCUSSION

Although a few German troops were at Varedes on the morning of September 6, the operations of the 3d Division had all the earmarks of a meeting engagement. The French were advancing in

several columns from the west, the Germans in a single column were moving north. Possession of the crests north and west of Vareddes was highly important to both sides.

All the German artillery was in position and firing effectively before their infantry had crossed the Marne. This artillery not only delayed the French advance, but covered the approach and deployment of the German infantry. When the French attacked in force, they were repulsed again and again.

The decision to advance the artillery was taken early. The movement was covered by mobile troops, the 3d Dragoons. The failure of the French on the south flank, on this day, may be attributed, in large part, to the early deployment of all the German artillery.

EXAMPLE III

On August 27, 1914, the French, who had been withdrawing to the south and west, made a stand on the line of the Meuse River. The 87th French Brigade occupied the woods west of Cesse, with small outposts near the river bank. Fourteen batteries of field artillery supported the brigade from a position in a clearing in the woods.

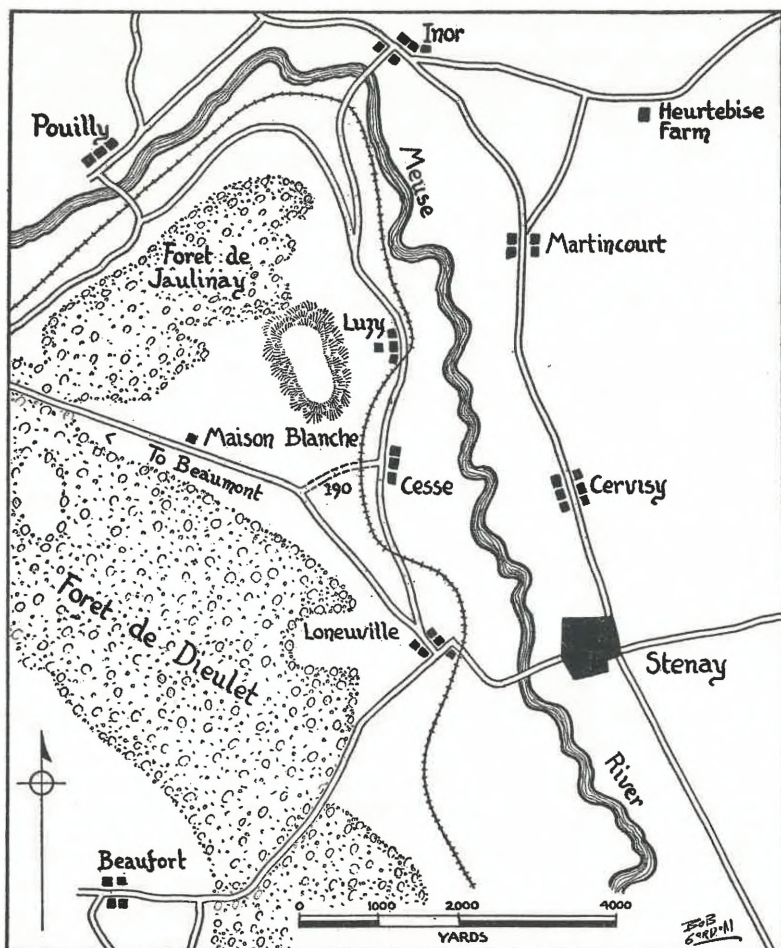
During the morning it was discovered that some Germans had effected a crossing. The French promptly attacked near Cesse and Luzzy, and drove them back. The fighting then died down.

In the afternoon a German column of infantry was seen descending the long slope from Heurtebise Farm toward Martincourt. It was estimated that there were some 3,000 men in the column. French artillery had previously registered on points on this road. The fourteen batteries divided the target, each taking a part of the column.

When the head of the column approached Martincourt, the French batteries suddenly and simultaneously opened fire. The German column was completely scattered with heavy losses.

Fifteen minutes later German artillery appeared on the same road, following the infantry. It, too, was in route column. The leading batteries attempted to go into action but were prevented by the massed fire of the French artillery. The German artillery withdrew.

From *A Brigade in Battle* by General Cordonnier, French Army.



Example III

DISCUSSION

Presumably the German column was ignorant of the exact situation, and, as a result, advanced in an extremely visible and vulnerable formation. The artillery, which should have been in position to protect the forward movement of the infantry, actually followed fifteen minutes behind it. The infantry had been dispersed before the artillery even attempted to go into position.

The infantry first, and then the artillery, made separate and successive efforts which led to disaster. For the German infantry to have reached the Meuse, it would have been necessary for it to get off the road, abandon such a vulnerable formation as column of squads, and advance under the protecting fire of its own artillery.

The commander of the German force should have previously ascertained the situation by reconnaissance, and issued orders before the infantry, in route column, became exposed to the fire of fourteen batteries. A partial deployment, prior to contact with the enemy, would have met the situation.

There are many similar examples in the mobile operations of the World War where troops approached the enemy in route column, on roads, and paid heavily for their temerity.

The advance guard of the 7th U. S. Brigade approached the Vesle in this manner: its support was caught by a devastating artillery fire while in route column. (This has been described in a previous chapter.)

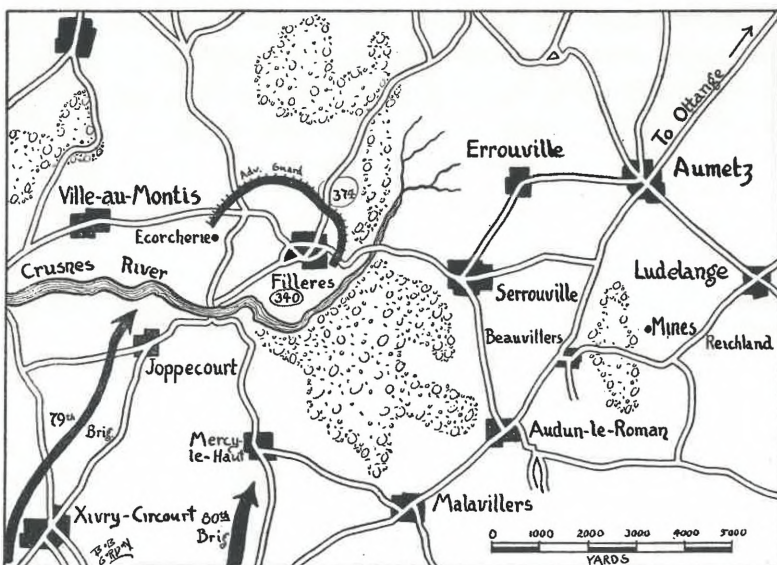
On August 22, 1914, at Ethe, the artillery of the advance guard of the French 7th Division was caught in route column on a forward slope and on a narrow road from which it could not escape; it was virtually destroyed by German artillery. On the same day a large part of the French 3d Colonial Division, marching in route column on the road near Rossignol, was surprised by German artillery fire. Half of it was destroyed or captured.

EXAMPLE IV

On August 22, 1914, the 40th French Division, echeloned to the right rear of other French forces that were advancing to the north, marched northeastward in two columns. The left column consisted of the 79th Brigade and the right column echeloned to its right rear, consisted of the 80th Brigade. This division was charged with the protection of the right flank of the French movement north. Farther to the right a cavalry division reconnoitered to the north and east.

The situation was obscure. Small German forces were known to be near but nothing was known of the larger elements.

The 79th Brigade marched in the following order:



Example IV

Advanced guard: 154th Infantry (less 2d Battalion)

Main guard: 2d Battalion, 154th Infantry
40th Field Artillery (3 battalions)
155th Infantry.

There was no French cavalry in front of the brigade.

The point passed Xivry-Circourt and entered Joppecourt. Here it saw and fired on hostile cavalry. About 8:30 a.m., after crossing the Crusnes, the 11th Company 154th Infantry, (the leading element), was fired on from Hill 340 near Fillieres. The leading battalion, assisted by the remainder of the advance guard, attacked and drove some Germans to the north and west.

With its units somewhat intermingled, the advance guard reached the line: Ecorcherie—Hill 374—Southeastern edge of Fillieres; the 2d Battalion 154th Infantry (leading element of the main body) was crossing the Crusnes. Suddenly a German attack, effectively supported by artillery, debouched from the woods east of Fillieres.

The 2d Battalion 154th moved south of Fillieres but was driven back by Germans attacking from the wooded ravine in that vicin-

ity. The French artillery went into position near Joppecourt but its support was not effective. The 154th Infantry, opposed by a strong enemy who was well supported by artillery, lost heavily. It reported that it could not hold. It was then ordered to withdraw south of the Crusnes toward Joppecourt. The 3d Battalion of the 155th covered the withdrawal.

The remainder of the 155th now moved north of the Crusnes toward Ville-au-Montis. Here it encountered advancing Germans who drove it westward in disorder.

The remainder of the 40th Division was equally unsuccessful and that night was ordered to retreat some twenty miles southwest of Joppecourt.

Let us now examine the movements of the Germans opposed to this brigade.

That morning the 34th German Division, an interior unit, had been ordered to move so as to be disposed at 7:00 a.m. as follows:

Advance guard (furnished by the 86th Brigade) on the line: Errouville-Mines Reichland.

Remainder of the 86th Brigade (which was composed of the 30th and 173d Infantry Regiments) and the 69th Field Artillery in assembly positions in rear of this line. The artillery prepared to support leading elements.

The 68th Brigade *in two columns just southeast of the Ottange-Aumetz Road, with its head near Aumetz.*

The 70th Field Artillery on this road abreast of the 68th Brigade.

The 14th Uhlans (cavalry) reconnoitering to the front.

This having been carried out, the division made a new bound forward at 7:30 a.m. Definite information concerning the French movement had been obtained as a result of cavalry reconnaissance.

The 14th Uhlans were directed to march on Fillieres, continuing reconnaissance.

The 86th Brigade was ordered to move to the line: Serrouville-Beuvillers.

During this movement the 69th Field Artillery was informed that it would support the 173d Infantry and the 70th Field Artillery that it would support the 30th Infantry. Thus all the artillery was prepared to cover the movement of the leading brigade.

The 68th Brigade (67th and 145th Infantry Regiments) fol-

lowed the leading brigade toward Serrouville *in approach formation, the companies moving across country.*

Upon completion of this bound, sufficient information had been received, in regard to the movement of the French columns, for the 34th Division to issue its attack order.

The rear brigade (less two battalions in division reserve) was moved north of the leading brigade. The latter attacked toward the line: Malavillers-Mercy-le-Haut, supported by the bulk of the artillery. One battalion of artillery was directed to support the attack of the four battalions of the 68th Brigade near Fillieres. The attack was successful and the French were driven to the west.

The 86th Brigade and, further to the south, the 33d German Division employed similar measures and were equally successful.

From the article in the March, 1926, *Revue D'Infanterie*, by Colonel Etienne, French Army.

DISCUSSION

The French 79th Brigade advanced in column with advance guard whereas the Germans were partially deployed, long prior to contact, and advanced by bounds until the situation became clearer. As a result the Germans were able to launch a coördinated attack with great rapidity.

The French fought a piecemeal action. Their infantry battalions came successively. Their artillery was late and ineffective. Contrast this with the German attack which was effectively supported by artillery from the very inception of the action.

The 154th French Infantry was crushed. Its casualties were appalling. Every officer in its 2d Battalion was killed or wounded. The two battalions of the 155th sent north of the Crusnes met a similar fate.

The German attack came as a complete surprise. The French 79th Brigade was unable to get its full power under way at one time. Its advance guard, in attempting to explore the situation, was decisively defeated before it could be effectively supported, and two battalions of the main body became involved in the debacle. Further south the remainder of the 40th French Division was similarly surprised. Night found it in full retreat.

Colonel Etienne contrasts the French forward movement "made

too fast and without prudence" with the method by which the Germans gained contact and became engaged.

He says "An examination of the orders issued in this action makes the advance of the 34th German Division stand out. Their division advanced by successive bounds, in a formation preparatory to combat, and with an artillery unit prepared to support each infantry unit.

"Before an adversary in movement, even more than before an adversary in position, contact should be effected by successive bounds—the advance being covered by elements seeking to discover the hostile front and direction of march.

"Advance guards should be sufficiently early in making dispositions that approximate combat formations. Unless one wishes to be caught deploying, dispositions must be taken at least 10 or 12 kilometers from the enemy. If both sides continue to advance it isn't at kilometer 12 that contact will be made, but at kilometer 6.

"Moreover, it is essential that such dispositions be made as will enable the artillery to intervene, in the minimum time, in support of the advance elements."

CONCLUSION

Lieutenant General Balck, German Army, in discussing the infantry attack in open warfare in his *Development of Tactics—World War*, says:

"Without considering long-range batteries, troops in march column approaching the effective zone of hostile fire can count on being fired upon when within 10 kilometers of the front. This requires that the column formation be broken into separate elements. In view of modern, long-range guns, it may easily happen that the enemy's projectiles will arrive sooner than the first reports of the reconnoitering units; thus the infantry will have to feel its way after it reaches the fighting zone.

"In no case must troops enter the hostile zone of fire in close order. . . . The development of the attacker must be made under the assumption that heavy artillery fire may start at any minute, and that the larger his force, the sooner will the enemy open fire. The utilization of cover afforded by the terrain, the adoption of formations calculated to lessen the effect of fire, the timely removal

of all vehicles from the column, and their movement from cover to cover, are the best means of avoiding hostile artillery fire."

We have seen that German regulations emphasize early development of the main body. French regulations go even further—providing for deployment or partial deployment *prior to contact*.

It must be noted, however, that for small units acting alone, partial deployment, prior to contact, renders changes in direction extremely difficult. In their case the distance from the enemy at which partial deployment may profitably begin will be greatly reduced. It should be remembered that the figures mentioned by General Balck and Colonel Etienne assume the proximity of large forces, adequately provided with artillery.

The desirability of the early deployment of at least a portion of the artillery was clearly brought out by many meeting engagements in the World War. Artillery and machine guns must go into position early if an attack is to come as a surprise and if the decisive effort is to be strongly supported. Finally, repeated disasters should teach infantry that—

A daylight movement in route column on roads in the neighborhood of an alert enemy is a short cut into action that will usually be paid for in heavy casualties.

CHAPTER XVII: THE ADVANCE TO THE ATTACK

The approach-march should bring the troops into their assigned zone, opposite and close to their attack objective, in good physical condition and with high morale.

IN WAR, many approach marches result in premature deployment, loss of direction, loss of control and heavy casualties. In fact, infantry frequently loses battles before it fires a shot. In mobile warfare the smaller infantry unit will usually have to make several advances under hostile fire for each opportunity to use its own weapons. Front-line troops shoot and are shot at; reserves are shot at but seldom get a chance to shoot.

In the approach march, units should adopt a formation which permits control by the commander and facilitates prompt entry into combat. The formation should be elastic. When the terrain offers good cover, columns of twos or even march columns may be utilized. On open ground, loosely organized troops are distributed laterally and in depth, but these must fit themselves to the terrain by frequent changes in formation.

A skirmish line cannot maneuver to take advantage of cover; therefore it is an undesirable formation for an approach-march. Column formations which facilitate maneuver, maintenance of direction, and control by the commander are generally preferable.

In all events movement should be along reconnoitered routes, well covered by patrols, and the greatest care should be taken to avoid premature deployment.

EXAMPLE I

Late on July 28, 1918, the 1st Battalion 47th U. S. Infantry was ordered to march forward to a certain farm where further orders would be issued by the 42d Division, to which it had been attached temporarily. The battalion made an all-night march to the Foret de Fere. Shortly after dawn orders were received at-

taching the battalion to the 167th Infantry and directing it to report to the command post of that regiment.

As the density of the foliage of the *Foret de Fere* afforded perfect concealment from the air, the battalion marched north, on the main road through this wood, in a column of squads. It was known that the Germans had recently been driven out of this area, but beyond this there was no information. The woods were alive with American artillery and troops, apparently in some confusion.

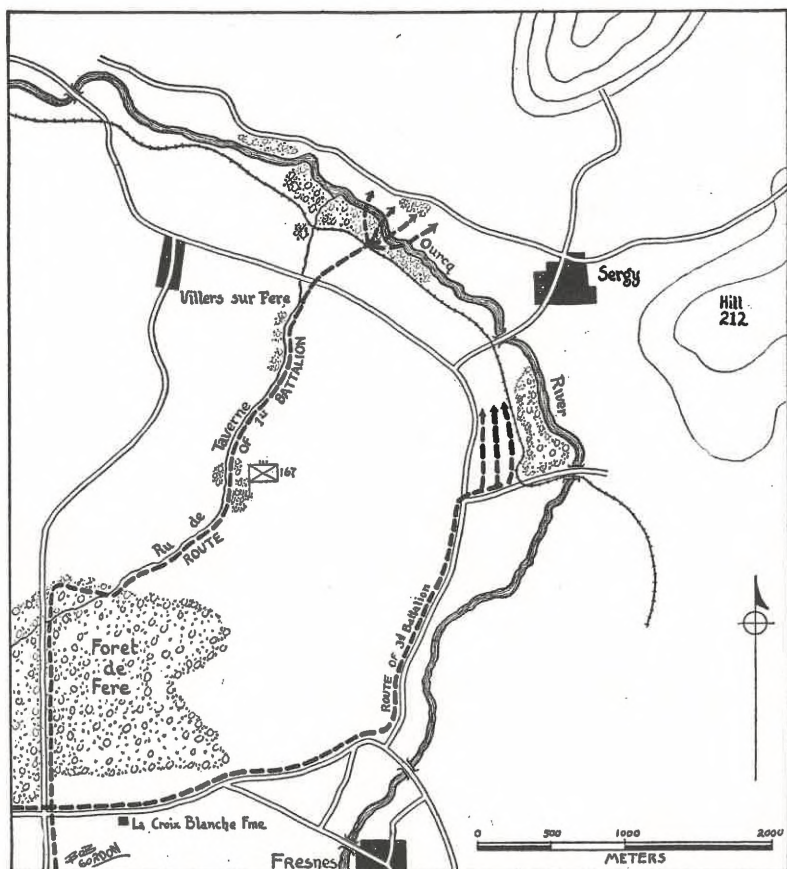
Early on the morning of July 29 the battalion reached the north edge of the forest. Previous to this a halt had been called and the troops given a breakfast which consisted of a fraction of their reserve rations. Being detached from their regiment and unaccompanied by their kitchen section, the battalion commander, on his own responsibility, authorized the use of a portion of the reserve ration.

The battalion, in column of twos, then moved along the edge of the forest to the *Taverne Brook* where the stream and the wooded ravine provided intermittent cover. Distances between platoons were increased (50 to 75 yards). Taking full advantage of all local cover, the advance continued to the vicinity of a grove of trees where the command post of the 167th Infantry was located.

Although machine-gun fire had been encountered, no casualties were incurred. Near the C.P. of the 167th the troops were placed under cover. After a short delay, instructions were received to move forward and relieve a front line battalion of the 167th. The movement was to be made by day.

Reconnoitering parties were sent forward. Two captains, accompanied by their own runners and runners of the 167th, moved down the *Taverne Brook*, appraised themselves of the situation to the front, and reconnoitered routes of approach. They learned that assault elements of the 167th were a short distance beyond the *Oucq*, that the enemy occupied the crest of the hill just beyond that stream, and that he had machine guns well sited and well concealed in the waist-high wheat on the hilltop.

The reconnoitering party also noted that after crossing the road south of and generally parallel to the railroad, it was shielded from hostile observation to the north by trees along the *Oucq* and scattered cover near the railroad.



Example I

The advance was resumed that afternoon. Company B, whose captain had been forward on reconnaissance, led the way. The battalion, disposed in column of twos, with increased distances between companies, moved along the Taverne Brook, where it could not be seen.

Arriving at the point where it had sight defilade from the north bank of the Ourcq, the column bore to the right and crossed the stream by means of fallen trees and by wading. At this point the battalion ceased to move as a single column. Companies now

moved separately to their assigned locations, in different formations. For instance, Company B advanced with two platoons in the lead and the other two following at 200 yards. Each platoon was in line of squad columns.

The forward movement of the battalion continued to an unimproved road, which generally marked the location of the front line. Here elements of the 167th Infantry were relieved and the approach march terminated.

The battalion had moved by day into a position close to the Germans without drawing any unusual amount of fire. It was in position facing its objective, in good condition. Only one or two casualties had been incurred. These resulted from artillery fire during the halt near the command post of the 167th.

Let us now examine the experiences of the 3d Battalion 47th Infantry, which made a similar movement at the same time and on almost the same terrain. This battalion was also detached from its regiment and moved forward. About three miles south of Sergy orders were received to the effect that the 168th Infantry had captured Sergy and that the 3d Battalion 47th Infantry would advance and mop up that village. The battalion was further informed that hostile artillery fire could now be expected.

The battalion continued down the road in column of squads. As the head of the column reached the road fork about one mile south of Sergy, an avalanche of German shells fell nearby. The battalion executed "Column right," and "Squads left" at its commander's order. Each company was then directed to form line of platoon columns and continue the advance—L Company on the left, I Company on the right, followed by M and K, respectively. Each platoon was disposed in columns of twos, in some cases with half platoons staggered. The forward movement, in general, paralleled the Ourcq.

Thus the battalion deployed suddenly and continued its advance across country. No reconnaissance had been made. To the right, American troops could be seen moving to the crest of Hill 212 but they appeared unable to get beyond the crest. They always came back.

The hostile shelling became heavier and heavier. Casualties began mounting. Platoon and company commanders did not know

where they were supposed to go or what they were supposed to do. A little later a village was seen through the trees to the right front, and machine-gun fire from this direction was added to the shell fire. The right assault company inclined to the right, toward the firing. L Company continued in its original direction. By this time the battalion had become so intermingled and had so lost direction that concerted action was impossible.

Companies broke up. Small groups of men milled around, not knowing what to do. There were two majors with the battalion but both had been wounded. Losses were heavy. Intermingled units straggled into the trees along the Ourcq and there the battalion remained all night.

From the personal experience monographs of Captain Jared I. Wood, Infantry, and Captain Howard N. Merrill, Infantry, who at the time commanded Companies B and M, 47th Infantry, respectively.

DISCUSSION

The problem of these two battalions was very similar—to get to the Ourcq in good condition and with minimum loss. Both organizations were ordered to make their advance by day. Friendly troops covered their movement.

The approach march of the 1st Battalion brought it close to and opposite its objective. The troops, sustaining practically no casualties, reached this position in excellent physical condition and in high morale. That is certainly the aim of an approach march.

The 1st Battalion's movement was characterized by a thorough utilization of the terrain. It was not seen; hence it was not shot up. It took advantage of the available cover and it adopted formations suitable to that cover. It reconnoitered for defiladed routes of approach prior to the advance. It changed into a widely deployed formation at the latest minute permitted by the situation. It had not been necessary to resort to this earlier because the reconnoitered route of approach was sheltered and the knowledge of the situation was ample.

The experience of the 3d Battalion was quite different. It made no reconnaissance. It marched in column of squads, down an open road toward a position behind the front line, even after being warned that it could expect artillery fire. That this battalion was not severely punished during this stage of the operation speaks

highly of its luck. Fortunately, the first salvos of the German artillery missed an excellent target and the battalion deployed. Whether it would have been better to deploy each company, but retain column of companies, and bear toward the shelter of the woods along the Ourcq, cannot be determined. The result of the actual deployment, made suddenly, and without sufficient information having been given to subordinates, was inevitable. Elements lost direction, units became intermingled, and the battalion disintegrated into a confused body of men who, after heavy losses, finally scrambled into the woods along the Ourcq.

This approach march cannot be considered a success. It was marked by lack of reconnaissance, failure to take the terrain and situation into sufficient consideration, and failure to acquaint the junior officers with what was intended.

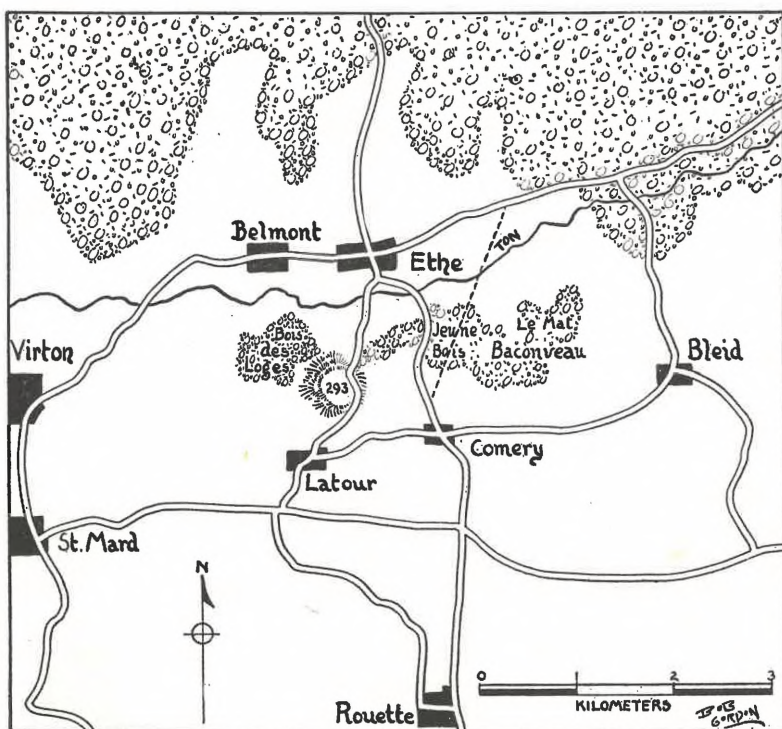
A lack of maps and the wounding of the two majors undoubtedly affected the situation adversely. However, the principal contrast between the 1st and 3d Battalions is this: the 1st Battalion moved over ground that had been reconnoitered, taking pains to hide itself; the 3d Battalion moved in a conspicuous formation over ground that had not been reconnoitered.

EXAMPLE II

On August 22, 1914, leading elements of the French 7th Division, marching to the north, were surprised in the fog by Germans, near Ethe.

Rear elements of the division received the order to attack in the direction of Belmont. The location of the Germans and of the leading elements of the French were uncertain. A few French troops were known to be on the forward edge of the Jeune Bois, and the Germans, presumably, were still north of the Ton, where their artillery could be heard firing. Many German guns appeared to be in action and all their fire seemed to be placed on the north slopes of the Jeune Bois. As observation was lacking, the German artillery was unable to fire effectively except on the hilltops south of the Ton and on the slopes near that stream.

The north edge of the Jeune Bois and the Bois des Loges were, what we would term today, the line of departure for the attack to be launched by the rear brigade of the French. This attack was



Example II

to be made with two battalions in assault and two in support. The left assault battalion was commanded by Major Signorino. It arrived in route column at Gomery where attack orders were received. Major Signorino did not know the situation and had no map other than a 1/200,000 road map.

Major Signorino at once deployed his battalion, using two companies as the leading echelon and two companies in rear. Each company similarly deployed with two platoons leading and two following.

Thereupon the battalion proceeded straight across country and right over the top of Hill 293, presenting the German artillery north of Etthe with a splendid target. The entire battalion came under heavy fire from the German guns (72 were in position to

fire) and suffered tremendous losses. The survivors ran in disorder to their right front into the Jeune Bois.

The same thing happened to the right assault battalion, which, being badly directed, also went over the top of Hill 293.

The German artillery had broken the attack before it even reached its line of departure.

From *Ethe* by Lieutenant Colonel Grasset, French Army.

DISCUSSION

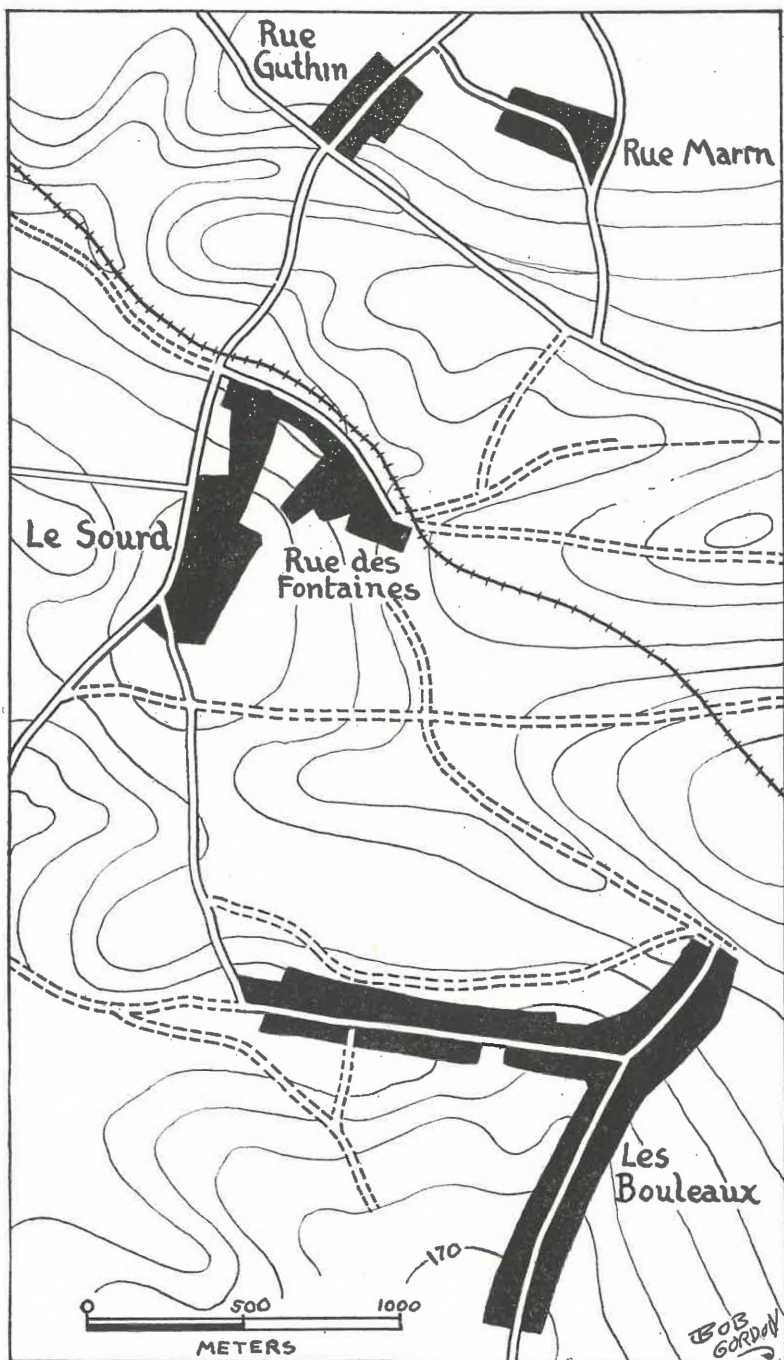
No sooner had the major received the attack order than he took up an approach-march formation such as we see diagrammatically indicated in many of our text books. It was a type of formation prescribed by the French Régulations of 1914. In some cases, this formation may be desirable for an advance under artillery fire. If there is no cover, we will unquestionably want to spread out. In this instance, however, the terrain seems to indicate a movement south of Hill 293. It appears that a covered route of approach was available, a route that could be followed in a more compact formation, probably in column of companies, with security detachments ahead and on the flanks. Such a formation would have insured both protection and control. The formation adopted not only precluded the use of the covered route of approach but resulted in the battalion advancing over *the only part of the terrain that the German artillery could effectively shell.*

EXAMPLE III

On August 29, 1914, the 4th German Guard Regiment had crossed the Oise and had its leading elements north of the Rue Marin. It received orders to attack southward to the east of Le Sourd with one assault battalion. This attack was part of a general advance of the Guard Corps.

The situation was obscure. A few French had been encountered north of Rue Marin but these had retired hastily. For several days the French had been rapidly retreating southward before the German advance.

The regimental commander of the 4th Guards designated the 1st Battalion as assault battalion. In his order he pointed out the east edge of Rue des Fontaines, which he mistook for Le Sourd. The



Example III

attack of the 1st Battalion started at 11:45 a.m., by which time the 2d Guard Regiment, on the right, had already captured Le Sourd. However, a few French had remained in Rue des Fontaines.

The 1st Battalion 4th Guards, which had only three companies available, deployed the 1st and 3d Companies in assault with the 2d following behind the center. Two platoons of the 6th Company (2d Battalion) joined the 1st Battalion instead of rejoining their own organization.

The 1st Company on the right, with all three platoons abreast, directed its advance against the eastern corner of Rue des Fontaines. The 3d Company guided on the 1st. As the 1st Company neared the village it was attracted by rifle fire from the southwest and obliques in that direction. All of the 3d Company obliques with it with the exception of one platoon which pushed on toward a knoll 400 meters east of the town where a small hostile detachment had been seen. A small gap was thus created in the front of the 3d Company. The 2d Company and the two platoons of the 6th Company moved forward immediately and filled this gap. Thus the entire battalion was deployed in one long skirmish line.

The 7th Company of the 2d Battalion with a platoon of machine guns was south of Rue Marin. One or two wounded who had returned to that place reported that the French were attacking with dense lines of skirmishers and that a terrific fight was raging. The 7th Company and the machine gunners rushed forward at once, covered 1,500 yards without stopping, and, exhausted and out of breath, mingled with the firing line southeast of Rue des Fontaines.

The French elements evacuated their advanced position and the Germans moved forward with almost no opposition until they encountered the main French position on the high ground near and north of Les Bouleaux. In the face of heavy small arms and artillery fire, the battalion pushed on. It was without artillery support, had no reserves and all its units were intermingled. Its advance was held up with heavy losses 500 yards from the French position.

From the account *The German Guard at the Battle of Guise* by Major Koeltz, French Army, based on German official documents, appearing in the June, 1927 number of the *Revue D'Infanterie*.

DISCUSSION

Here 900 to 1,000 men were engaged to throw back a few observation elements. The German battalion split up. The reserves hastened to the firing line. False information reached the rear, and portions of another battalion rushed to the rescue. Units became intermingled.

Then, under these unfavorable circumstances, the real resistance was encountered. Premature deployment had resulted in a blow in the air.

These errors were not committed by untrained troops. They were committed by the German Guard, which had a deservedly high reputation and which was commanded by the pick of the German officers.

CONCLUSION

The formation for the approach-march should be elastic, readily lending itself to maneuver. Above all it should reduce both the visibility and the vulnerability of the unit.

The situation and the terrain will dictate whether or not the approach-march will be made on or off roads and trails. Generally it will be made along ravines, slopes, and low portions of the terrain, as these avenues provide more cover than conspicuous hill-tops and ridges. In open warfare the enemy will not have sufficient artillery and ammunition to maintain a constant interdiction of these covered routes.

The approach-march must be secured either by advance guards or by units already engaged and should be made over ground that has been thoroughly reconnoitered. Its object is to place troops close to their attack objective in good condition, with good morale and with minimum losses. There is no formation which of itself can accomplish this.

The best way to avoid losses is to avoid being seen. The terrain itself will indicate the most suitable formation that can be employed without sacrificing control. Reconnaissance will enable the leader to read these indications.

CHAPTER XVIII: BATTLE RECONNAISSANCE

Infantry commanders of all grades are responsible for continuous reconnaissance.

DURING combat, leaders always seek information that will answer such questions as: "Does the enemy occupy those woods?" "Where is Company B?" "Is that hill held by the enemy?" "Where is my left assault company?" "I see hostile movement to my right front—what does it mean?" Answers to such questions will be obtained only through the medium of reconnaissance—reconnaissance to determine not only the hostile situation but the situation of our own troops as well.

The limitations that unfavorable conditions of terrain, weather, and visibility impose upon air service, cavalry, armored motor units and similar means of positive intelligence, will often render those agencies ineffective. Furthermore, the information gained by these sources seldom reaches the front line infantryman in time to be of value.

The subordinate infantry commander has at his disposal only one sure means by which he may secure timely and vital information, namely, the prompt and aggressive action of infantry patrols. A well organized and properly conducted infantry patrol may operate successfully in spite of unfavorable weather, poor visibility, and difficult terrain.

Successful patrolling, however, demands the highest of soldierly virtues. The personnel of an important patrol must not be designated at random. The men should be carefully selected and only the intelligent, the physically fit and the stout of heart should be considered. One careless or stupid individual may cause the death or capture of the entire patrol and the resultant failure of the mission. The moron, the weakling and the timid have no place in this hazardous and exacting duty.

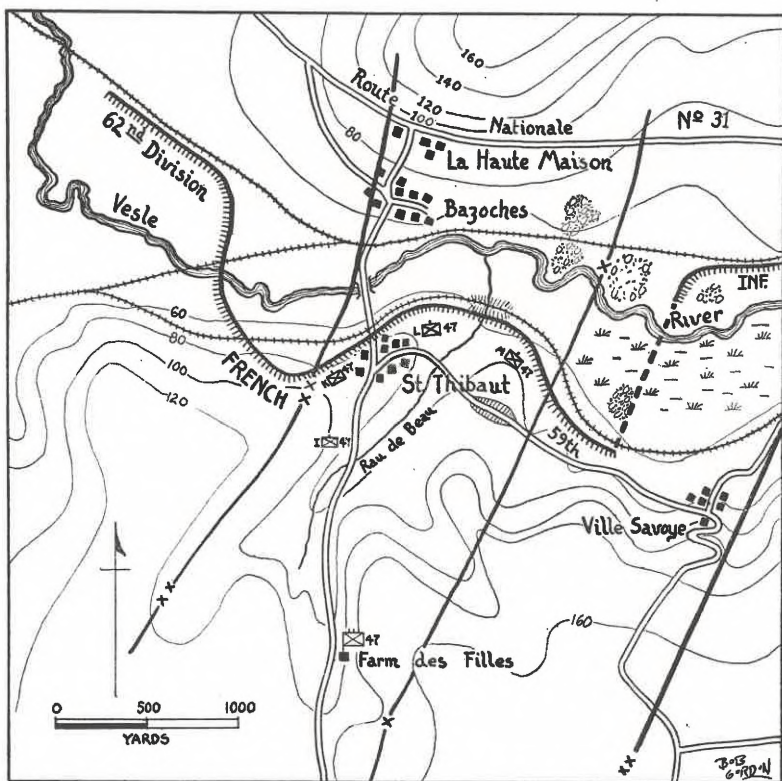
Of great importance in the scheme of "continuous reconnaissance" is personal reconnaissance by the commander. Personal observation, coupled with accurate information from other sources,

enables him to make correct deductions from the past, prepares him to act promptly and effectively in the present, and permits him to anticipate the future.

EXAMPLE I

For two days the 47th U. S. Infantry, in conjunction with other troops, had made a determined effort to establish a bridgehead across the Vesle in the vicinity of the village of St. Thibaut.

The 2d Battalion had succeeded in effecting a crossing early on the morning of August 7, but had been subjected to such terrific punishment that it was no longer capable of effective offensive



Example I

action. It was ordered, therefore, to withdraw to the vicinity of the Farm des Filles.

The following excerpts, taken from the personal experience monograph of Captain H. E. Fuller, at that time in command of the 3d Battalion of the 47th Infantry, are of interest in connection with the employment of patrols in the subsequent action:

"During the early evening of August 9th the 2d Battalion withdrew. This move left the 3d Battalion holding all of the 7th Brigade front along the narrow gauge railway embankment south of the river. Contact was established with the 59th U. S. Infantry on the right and the 62d French Division on the left.

"The day of August 10th was markedly quiet compared with the three previous days. There was, however, some sniping and a little artillery fire on St. Thibaut.

"About 4:00 p.m. the regimental commander informed the battalion commander that a reliable report from the aviation indicated that the enemy had evacuated the area to the front and was hurriedly retreating to the Aisne River. He then directed the battalion commander to take up an advance-guard formation and move at once in pursuit of the enemy until contact had been gained.

"The colonel was informed that the battalion was now in close contact with the enemy and that any ground north of the Vesle would be gained only as the result of a well organized attack. The colonel insisted upon the reliability of the information he had received, and pointed out the embarrassment it would entail if the enemy slipped away undetected. It took a great deal of talking to convince him that there were yet enough of the enemy to the front to stop an advance-guard march.

"As a result of the discussion with the regimental commander, the 3d Battalion was directed to send out patrols and to follow them up with the battalion if the enemy was found to have evacuated the area to the immediate front.

"After conferring with the company commanders, and explaining the regimental commander's instructions, five patrols were selected, each composed of one noncommissioned officer and one private.

"These men were selected for their fitness for reconnaissance-patrol work. They were equipped only with pistols, gas masks,

and canteens. They were assembled before dark at points from which the area to be covered could be seen. Their instructions were to cross the Vesle and penetrate to the high ground north of the Route Nationale to determine whether or not the enemy had evacuated the area to the front. They were further instructed to report to the battalion command post immediately after completing their reconnaissance. These patrols were distributed along the front at five different points. The area to be covered extended from the St. Thibaut-Bazoches Road, which was to be used as a route for the left patrol, to a point more than 1,000 yards east of St. Thibaut.

"Company commanders concerned were instructed to start the patrols as soon as it was sufficiently dark to hide their movement.

"In the meantime each company was directed to be prepared to move out, if the reported evacuation was indeed a fact.

"About 10:00 p.m. two of the patrols which had tried to cross the Vesle, at and near Bazoches, reported back with information that Bazoches was held by the enemy. This information was transmitted promptly to regimental headquarters. Between 10:00 p.m. and 11:00 p.m., two other patrols reported in with information that they were unable to cross the river because of the presence of the enemy on the opposite bank. The leaders of these patrols stated that they had remained on the river bank for some time observing the movements of the enemy on the other side. The enemy, they said, appeared to be concentrating troops just north of the river, particularly in a patch of woods just north of the railway and about 800 yards east of Bazoches.

"About midnight one member of the patrol from Company M, whose route was on the extreme right, reported in. He was very excited; in his hand he had a Luger pistol and the shoulder strap of a german uniform. He reported that he, and the corporal who started with him, by working well into the sector of the 59th Infantry, had reached a point about 300 yards south of the Route Nationale and about 1,000 yards east of La Haute Maison. Here they stopped because of enemy traffic on the road. He stated that while lying in wait, the enemy had unloaded some sort of weapons on small wheels and had moved them south toward the river. (From this description, these were judged to be either machine guns or minenwerfers.) He also stated that several small groups

of enemy soldiers came in along this road and turned south toward the river. As the returning patrol was passing through some woods about 400 yards west of the left of the 59th Infantry, north of the river, it encountered a large number of German soldiers. The patrol was discovered and fired on. There was some fighting at close quarters during which the private killed a German from whom he took the shoulder strap and the pistol. The corporal was shot through the neck, but made his way into the lines of the 59th Infantry where he had been left for first aid.

"From the information gained by the patrols it was quite evident that the enemy was not retiring. On the contrary, it appeared as if he intended to attack.

"This information was transmitted immediately to the regimental commander by runner and telephone. Runners were also dispatched to the 59th Infantry on our right and the French on our left with messages giving the substance of the information the patrols had secured.

"Early the next morning the enemy launched an attack against the 3d Battalion which was easily and quickly repulsed."

DISCUSSION

The foregoing narrative serves as an excellent example to illustrate the effective employment of small infantry patrols in battle reconnaissance.

Information as to the location and probable intentions of the enemy had to be gained at once. Personal observation and the use of patrols were the surest and quickest means of securing this.

The following facts relative to the organization, equipment, and mission of the patrols are of particular interest:

Not one patrol but five were ordered out, thereby increasing the chances of success and insuring that the entire front would be covered. The patrols were of minimum strength and composed of specially selected men. Each patrol had a definite mission and was assigned a well defined objective: namely, the Route Nationale which could be easily located, even during darkness. Each patrol was shown, by day, the area over which it was to operate. The equipment of the patrols is worthy of note, the substitution of pistols for rifles being an excellent idea.

The fact that only one patrol actually reached the objective is unimportant. All patrols brought back valuable information. Those that were unable to cross the river because of the close proximity of the enemy brought back conclusive evidence that the enemy was still in position in considerable force and that no withdrawal was in progress. Moreover, the information gained by two of these patrols, together with the report of the one which did succeed in crossing, made it clear that the enemy, far from contemplating a withdrawal, was about to attack.

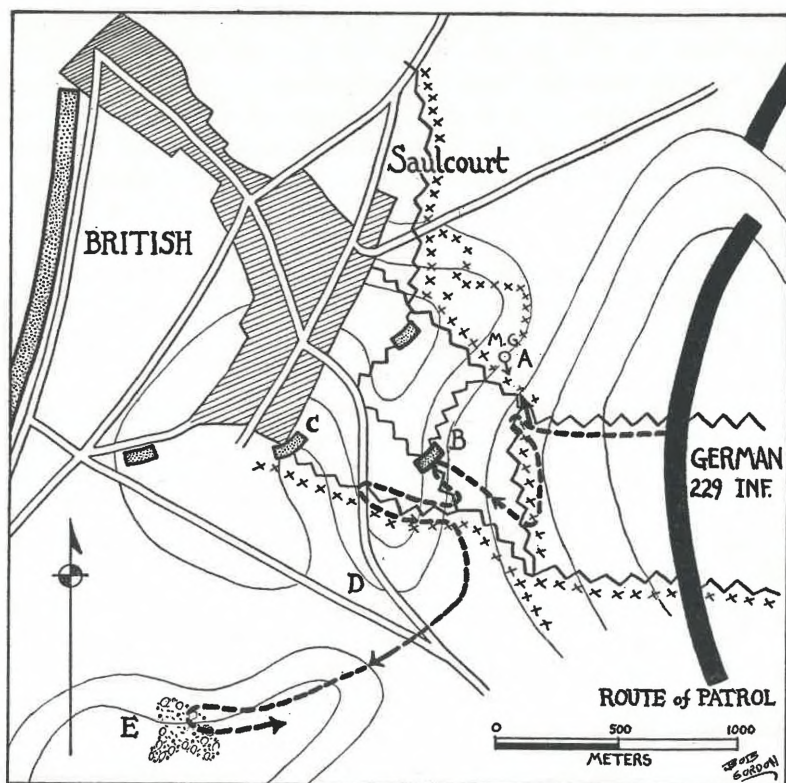
EXAMPLE II

On March 22, 1918, the German 229th Reserve Infantry Regiment was participating in the German offensive toward the west, which had begun the day before. After a considerable advance, the attack of the 229th was slowed down as it approached Saulcourt. The Germans were in contact with the English but it was uncertain just where the latter would offer their principal resistance to a renewed attack.

A patrol, consisting of a lieutenant, an ensign as second in command, one light machine gun squad, and one rifle squad, was sent forward to determine the location of the new hostile main line of resistance. Machine gun and minenwerfer fires by the regiment were to assist the patrol.

The patrol moved forward about 11:30 a.m. in a suitable formation. Upon nearing A it came under fire from a machine gun (as indicated) and suffered two casualties, the leader being killed. The ensign then took charge and, not wishing to become involved in a fight, he withdrew the patrol to the rear. This action was facilitated by the covering minenwerfer fire which was placed on the machine gun near A.

The patrol crawled forward again after a slight detour, and near B surprised and captured two enemy sentries. It continued forward, advancing down an old trench. Heavy fire was then encountered from the direction of C. The patrol leader showed his map to his men and ordered them to move back, individually, some 300 meters, then move south across the road and assemble in the vicinity of D. This was done. Hostile fire continued on the area which the patrol had just vacated.



Example II

At D the patrol leader could see that the English held Saulcourt, but it did not appear that the town was occupied in force. He noted that English outposts were advanced directly east of the town, but did not extend far to the southeast, since he could locate no enemy near D. The patrol leader, taking great care to avoid hostile observation, then moved his patrol to the small wood at E.

From E he could see small English detachments on the south-east edge of Saulcourt while directly to the west of the town, and 600 yards in rear, he observed strong hostile forces digging in. The left flank did not extend far south of Saulcourt. The patrol leader immediately returned with his patrol to his regiment. It had been

gone two hours. The leader reported that Saulcourt was held by an English outpost, with the main line of resistance 600 yards in rear, and that there seemed to be a gap in the English defenses south of the town.

Based on this report, the division attacked without delay, making its main effort on the south, only a demonstration being made against Saulcourt from the east. The attack succeeded with slight losses.

From an article, page 323, in *Kriegskunst in Wort und Bild*, in 1928, dealing with the historical basis of certain portions of the present German Regulations.

DISCUSSION

The article ascribes the success of the division's attack in large part to the leading of this one patrol. The paragraph of the German Infantry Regulations with which the article dealt reads as follows:

"Reconnaissance may never be omitted during battle. No difficulties of terrain and no exhaustion of troops or leaders should cause it to be neglected.

"Careful reconnaissance requires time but it is nevertheless without value if the commander is not informed at the right moment as to its results."

Points of interest in the leading of this patrol are as follows:

The patrol was led with vigor and determination. Having encountered resistance at several points it moved back in each case and tried elsewhere. It did not become involved in a useless fight nor did it permit enemy outposts to prevent it from accomplishing the mission of locating the British main line of resistance.

The fact that there were no British near and east of E, although negative information, proved of decisive importance.

The patrol leader got his information back promptly—in time for the important data he had obtained to be immediately exploited.

Information is of no value if it does not reach the proper commander in time for him to use it.

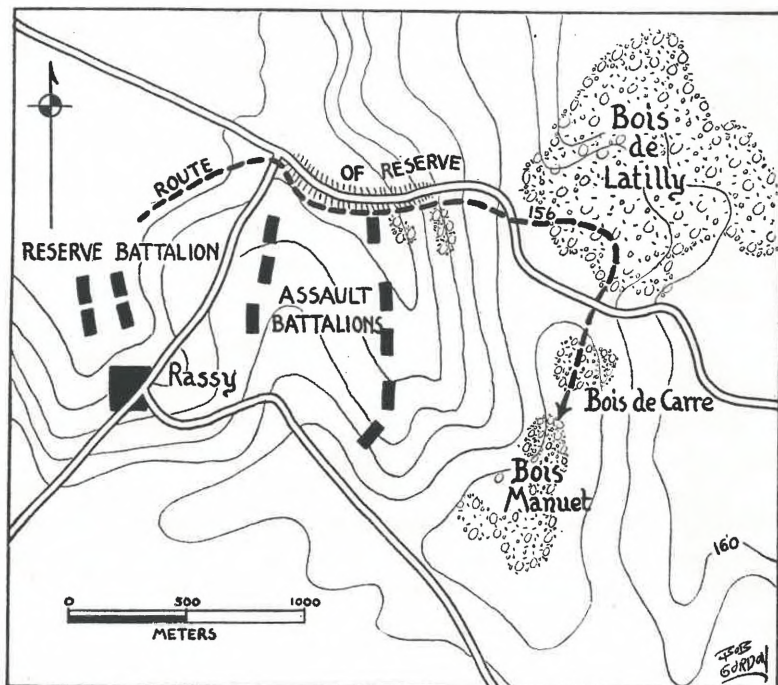
EXAMPLE III

On July 20, 1918, a group of French Chasseurs (3 battalions), in conjunction with other troops, attacked toward the Bois Manuet

in column of battalions. An unexpectedly strong resistance developed from this wood that had been believed to be but lightly held.

The leading battalion and the one immediately behind it were pinned down a short distance in front of the wood by heavy machine gun fire. Liaison between units of these battalions was very difficult as few men could move. The attack was definitely checked.

At this time the commander of the reserve battalion moved forward to make a personal reconnaissance and to acquaint himself with the situation. He found the commander of the leading battalion in a shell hole on the crest northeast of Rassy. This officer had been wounded and could give little information beyond the fact that his entire battalion seemed to be pinned down and that the enemy resistance from the Bois Manuet was very strong. One of his companies had gone astray. It appeared that if any advance



Example III

were to be made it would have to be made by the reserve battalion.

The commander of the reserve battalion continued his reconnaissance. To the north he discovered a slight depression and what appeared to be a covered approach leading therefrom toward Hill 156 and the Bois de Latilly. Nearby crests were swept by hostile fire but, in so far as he was able to determine, no fire reached this approach. He therefore concluded that an advance by this route was feasible and ordered his battalion forward. He directed that small patrols be sent forward along this approach, followed at a considerable distance by approximately half his battalion. He had previously arranged for covering fire on the enemy to the front.

The patrols reconnoitered the route and found it protected from hostile fire. The battalion commander followed near the head of his half-battalion which moved in single file. Upon reaching the southern edge of the Bois de Latilly, a patrol that had been sent to the east edge of this wood reported that it had found there the missing company of the assault battalion. The battalion commander ordered this company to provide security to the east and then sent back for the remainder of his battalion. Upon its arrival he established a base of fire perpendicular to the enemy front, and attacked southward.

The Bois Manuet was quickly taken from its defenders—a fresh German battalion.

While the losses of the original assault battalions were heavy, the reserve battalion lost only eight killed and twenty-three wounded during the entire day. The German battalion seems to have been almost entirely captured or destroyed in its fight against the three French battalions.

From *Infantry Conferences* by Lieutenant Colonel Touchon, French Army.

DISCUSSION

The foregoing historical example provides an excellent illustration of the value of personal reconnaissance by the commander.

Going, in turn, to each of the assault battalions which were held up, the commander of the reserve battalion gained first-hand information of the existing situation, obtained a good view of the terrain to the front and flanks, and was thereby enabled to formulate a sound plan for the employment of his unit.

Having formulated a plan and selected a tentative route of advance (which he had personally discovered), he ordered small patrols to precede his battalion as reconnaissance and covering groups. As a result of his own reconnaissance, he was more than reasonably certain that the route selected was suitable for his advance, but he took the additional precaution of sending forward patrols.

The success of the maneuver may be directly attributed to the careful personal reconnaissance made by this battalion commander.

EXAMPLE IV

The 47th German Infantry, part of the 10th Division, was initially in division reserve in the attack of July 15, 1918, that was launched across the Marne against the 3d U. S. Division. The 47th was to cross the Marne after the assault elements (the 6th Grenadiers) had cleared the south bank in the vicinity of Mezy.

The 1st Battalion reached its assembly position north of the Marne after suffering relatively heavy losses from American artillery fire. Extracts from its report on subsequent operations follow:

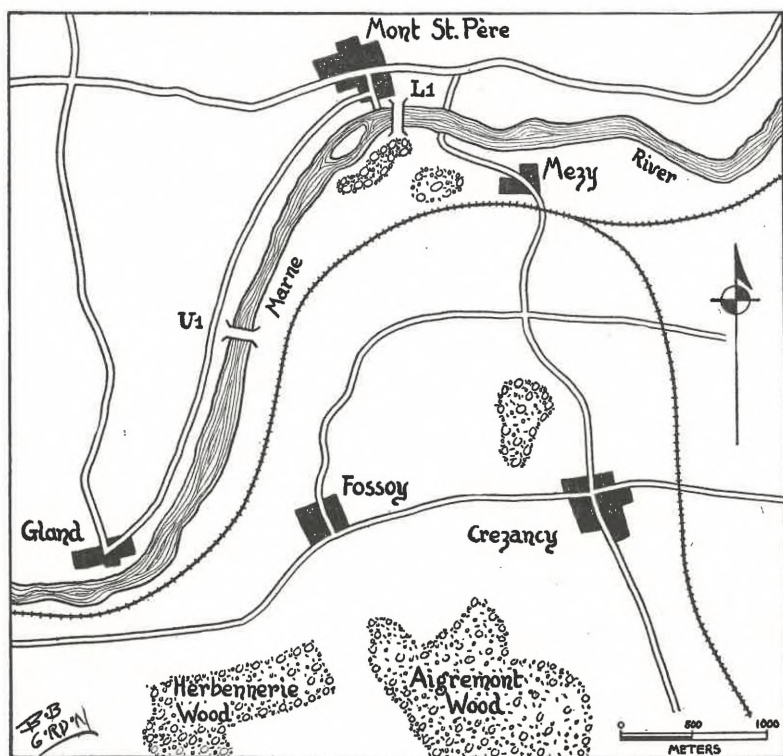
"1st Battalion 47th Infantry was to assemble at 4:50 a.m. as the first battalion of the regiment to cross the Marne. Its departure was delayed a few minutes, since, according to reconnaissance of the orderly officer, bridge L-1 had not yet been entirely completed.

"The battalion assembled at 5:00 a.m. to march to the bridge. Effectives when proceeding to the attack: 11 officers, 49 NCO's and 244 men, including staff and 1st Machine-Gun Company.

"The Battalion Staff with the 4th Company, elements of the 3d Company and the 1st Machine-Gun Company then proceeded to the Marne and crossed it by bridge L-1 which was nearly completed.

"After making their dispositions, which required a great deal of time because of the heavy hostile fire, the 1st and 2d Companies and elements of the 3d Company followed. The forward movement of these companies entailed great difficulties due to the brisk barrage that was now directed at the village of Mont St. Pere.

"Since the enemy's infantry did not intervene when the battalion crossed the bridge and since, according to divisional orders, the 6th Grenadier Regiment was to clear the village of Mezy and the wooded section south of bridge L-1, the battalion advanced in



Example IV

column of route on the southern bank. Its leading elements had penetrated about 200 meters into the high wheat there, when they were suddenly overwhelmed with highly effective rifle and machine gun fire from the direction of the Mezy-Mont St. Pere Road and the wooded section south of L-1.

"It not yet being full daylight and the fog still prevailing, the position of the enemy could not be definitely determined. In spite of the low visibility the battalion immediately met with heavy losses. The 4th Company, which was the foremost unit, suffered especially. On account of the high wheat, the troops could fire only from the standing position; whoever raised his head above the wheat was almost always hit.

"All six guns of the machine gun company immediately as-

sumed the highest possible firing position and opened fire. However, the enemy was apparently well dug in and probably sitting in trees as well, and the wheat was too high even for the highest firing position of the machine guns. Therefore no effect was obtained, despite the concentrated fire and the liberal expenditure of ammunition. Within a few minutes one man of the company had been killed and eight wounded. The losses of the infantry were heavy.

"A further advance was useless without the support of escort artillery and trench mortars which were not on hand. The attack of the battalion gradually slackened and finally came to a standstill, since the men, even when crawling, were hit by enemy riflemen sitting in trees. Under these circumstances, the machine-gun company could no longer hold its ground. It withdrew with its guns, ammunition and wounded and took up a new position close to the southern bank of the river. But here, too, no fire could be delivered owing to the high wheat. It was absolutely essential that something be done so the company retreated to the high ground on the north bank which permitted commanding fire. But, as yet, nothing could be seen from here either.

"The 3d and 4th Companies, which were in the front line, suffered badly from rifle and machine-gun fire and finally even from rifle grenades and shrapnel. The battalion commander who was at the head of the battalion crawled back to report to the regiment and ask it for auxiliary weapons. Such weapons were not available, however, since they could not be brought up.

"Whoever of the 3d and 4th Companies could crawl back, did so and took up position on the north bank of the Marne. The adjutant having been killed and both the battalion commander and the orderly officer having been wounded, details on the subsequent events can no longer be ascertained by the battalion."

Portions of the 1st and 2d Companies do not seem to have crossed the Marne. The report says the battalion was reduced at this time to the effective strength of a small company.

Let us see what the 2d Battalion, which was dug in north of bridge L-I, did on this day. Early in the morning it supported the advance of the 1st Battalion by fire from the north bank. At 9:45 a.m. it received orders to cross the Marne via the crossing of

the 398th Infantry Regiment (U-1) in order to take in flank the machine-gun nests at the railway embankment and in the woods north of the railway. Let us now quote from this battalion's report.

"Personal reconnoissance by the commander of the 2d Battalion showed that U-1 could not be reached under cover and that a march to that point would probably cause inexcusable losses in view of the well aimed fire of the French artillery. The battalion therefore decided to cross by bridge L-1. It asked permission from the regiment to do so, assembled its units, and crossed in the following order: 8th, 7th and 5th Companies, two platoons of the machine gun Company, 6th Company, one platoon of the machine gun company. Leading elements extended to the left on the southern bank and opened fire on Mezy and the edge of the wood. The 7th Company followed and extended to the right.

"As soon as they attempted to advance, the companies received heavy rifle and machine-gun fire. Contact was gained on the right with the 398th Infantry by a patrol under the command of 2d Lieutenant Hoolmann. An NCO patrol was sent to establish liaison with the 6th Grenadier Regiment on the left.

"The 6th Company now extended the front to the right, overwhelmed the enemy and took possession of the foremost wooded section (just south of L-1). The advance was made under heavy enemy shell fire. The battalion then attacked the next wooded section. It was met by brisk machine-gun fire at close range. Captain Meyer and 2d Lieutenant Goldau were killed. The enemy was dispersed. The battalion took the railway embankment and the terrain immediately south of it. It connected up with the 398th Infantry on the right and reported the objective reached, inquiring whether it should continue to advance and whether or not it might expect support and extension to the left.

"Patrols were sent out to the south and to the east. Sergeant Hentschke in command of a small patrol advanced to a point east of Fossoy, found the terrain free from enemy troops and saw a German skirmish line enter Herbennerie Wood. This patrol took several prisoners, destroyed a gun and a light machine gun, and brought back two badly wounded grenadiers. It also found that Mezy was unoccupied by the enemy.

"The battalion was now informed by the regiment that no further support could be given. A patrol was again sent to Mezy to protect the left flank. It was fired on. This hostile group which was not particularly strong, was dispersed by a platoon of the 6th Company, but at considerable cost.

"Since no contact could be gained with the 6th Grenadiers, close liaison was maintained with the 398th Infantry, and dispositions for the night were agreed upon."

On the morning of July 16 the battalion, in accordance with orders issued during the night, withdrew to the north bank of the Marne without suffering any loss in the movement.

The report of the battalion commander, 3d Battalion 47th Infantry, tells why the 2d Battalion commander considered it impracticable to make the crossing at U-1 as ordered on the 15th.

According to the map it appeared possible to cross at U-1. The order from higher authority specified that the 2d Battalion, followed by the 3d, would move under cover of the woods from its present position to bridge U-1. The 3d Battalion report states: "The entire slope west of Mont St. Pere-Gland Road was shown on the map as wooded, while in reality it was completely bare and could be observed at all points by the enemy. Moreover, the road leading from Mont St. Pere to U-1 was under heavy artillery fire."

The 3d Battalion commander also made a personal reconnaissance and in addition sent out an officers' patrol to investigate the situation before he acted on the order to move over U-1. He reached the same conclusion as the commander of the 2d Battalion.

From Battle Reports of the 47th German Infantry.

DISCUSSION

The preceding account gives an interesting comparison of the separate advance of two battalions over the same ground on the same day.

It is apparent from the account of the operations of the 1st Battalion that little or no actual reconnaissance was attempted on the south bank of the Marne.

The battalion commander undoubtedly made the assumption that the 6th Grenadier Regiment held the ground to its front and would therefore furnish ample protection for his crossing. The

assumption was logical but steps should have been taken to verify it. As it happened, the 6th Grenadiers had been virtually annihilated near Mezy and furnished no protection whatever.

The subsequent actions of the 1st Battalion furnished the realization of the machine gunner's dream "to catch troops in route column at close range."

The ruinous losses suffered by the 1st Battalion are wholly attributable to a lack of proper reconnaissance.

By contrast, the actions of the 2d Battalion stand out as a shining example of how it should have been done. The personal reconnaissance of the battalion commander disclosed the folly of an attempted movement to the U-1 crossing. The prompt deployment of the battalion as soon as it gained the south bank, coupled with the active employment of reconnaissance and contact patrols, effectively prepared the way for a successful attack.

EXAMPLE V

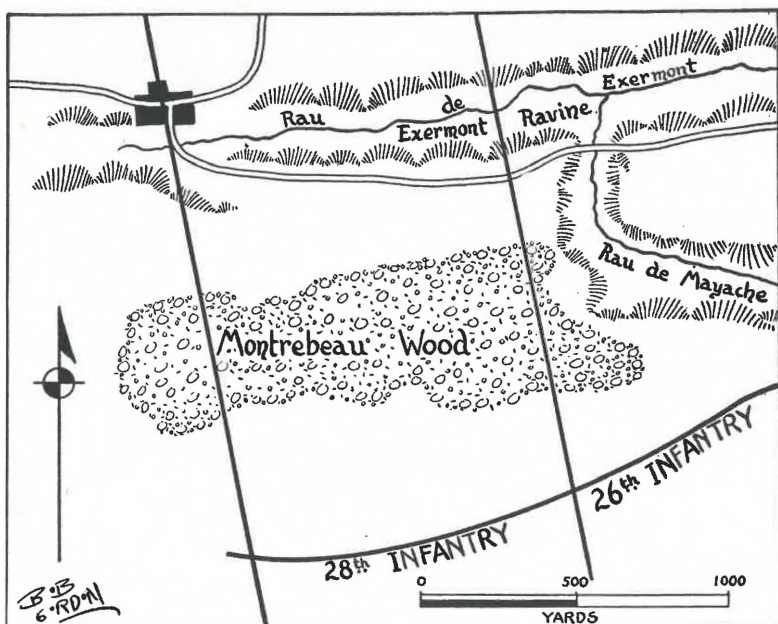
During the Meuse-Argonne offensive the 26th U. S. Infantry (part of the 1st Division) relieved troops of the 35th Division along the general line indicated on the sketch.

Although the regiment was in contact with hostile patrols the location of the principal enemy defensive position remained uncertain.

The following narrative of a combat patrol during the subsequent operations is quoted from the personal experience monograph of Major Barnwell R. Legge, at that time a battalion commander in the 26th Infantry:

"On the morning of October 2d, before daybreak, front-line battalion commanders received an oral order, originating at Corps Headquarters, to penetrate the enemy screen in their front with strong combat patrols and locate his defensive position. This order was based upon a report from the French, on the left of the (Argonne) forest, that the enemy had withdrawn.

"In compliance with the regimental order, the battalion commander of the right flank battalion sent forward a patrol of two officers and 70 men. Anxiety for the safety of the patrol caused him to send with it a corporal and private from the signal detachment with a reel of breast wire and a telephone.



Example V

"In the confusion that followed no report except an oral one was made. In this detachment one officer and twelve men survived. The following comes from the officer's personal diary: 'The patrol left battalion headquarters about one hour before sunrise, two officers and 70 men; it advanced in double file to the line of outguards. At the line of outguards it deployed in two waves, the first wave as skirmishers, the second in squad columns about 50 feet in rear—the fog was thick. The two officers were between the skirmish line and line of squad columns. When the patrol had advanced about a half kilometer, it was fired on by several machine guns from Montrebeau Wood. Lieutenant X ordered the patrol to double time to the draw which was just ahead of us. We advanced at a run to the Rau de Mayache and up the crest of the hill on the other side. Several men fell; we could see nothing to fire at. At this point the patrol was stopped by machine-gun fire from the left, the left rear, and from across the Exermont ravine. Suddenly a nest of two guns about 40 yards in front of us opened up. Lieu-

tenant X, the patrol leader, was killed, as were a number of the men, while trying to rush the nest. It was finally put out and two Boche killed. Fire was so heavy that we had to dig in where we were. Men were falling on all sides. At this time Corporal X cut the phone in. I got the battalion commander and told him what a mess we were in. He said to hold where we were. The fire from the woods to our left rear became so heavy that I sent Corporal X and six men to work their way against it. They succeeded in putting out one light machine gun and reported the woods heavily held. About one hour later some thirty Boche were discovered, immediately in rear of the remnants of our patrol, in skirmish line. Part of the patrol was faced to the rear. Just then Captain X was seen coming forward with a part of his outfit and the Boche withdrew. About 1:00 p.m. orders were received to withdraw to the line of outguards. We had about 20 men left who were deployed on a front of 200 yards. I managed to get 12 survivors back to the line of outguards and reported my arrival to the battalion commander.' "

Major Legge, in commenting on this incident, concludes:

"As great as was the cost, the patrols had accomplished their mission. Information was now available to lay the barrage for the initial attack."

CONCLUSION

"If the army knew what the army was doing, the army would beat the army," said old de Montluc back in the Middle Ages, in trying to impress the importance of information upon the soldiers of his day.

If we paraphrase it thus—"If the Blue army knew what the Red army was doing, the Blue army would beat the Red army"—de Montluc's words are as true today as they were in the Middle Ages.

Sometimes reconnaissance will let us know what the Red army is doing—as the aggressive patrolling and small raids told the Allies the location, extent, date and hour of the German offensive of July 15, 1918.

More often, reconnaissance will reveal what the enemy is *not* doing. Even so, negative information is of great value.

The fate of an army may seldom hang on the conduct of one small patrol, but the success of a battalion or even a division frequently will.

Officers sending out patrols should never lose sight of the fact that the success of a patrol is largely determined by the character of its leader and the fitness of the men composing it.

Patrols should be carefully instructed as to the situation in the immediate vicinity. Above all they should be given a clear and definite mission.

Undoubtedly, economy of force in reconnaissance must be observed; subject to this, the old saying is a good guide:

"When it is apparent from the situation that patrolling is unnecessary, send out patrols anyway."

CHAPTER XIX: TIME AND SPACE

Under battle conditions a large factor of safety must be included in all time and space calculations.

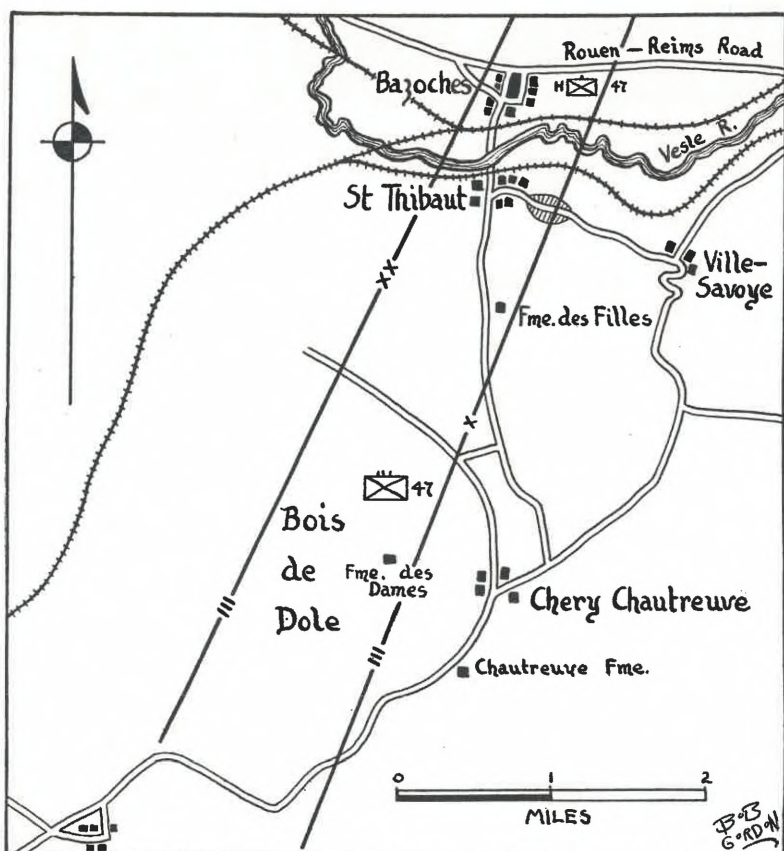
INCORRECT estimates of the amount of time required for the distribution of orders, for the movement of units to new locations and for the necessary reconnaissances by subordinates, frequently lead to tactical failure. A strict application in any given situation of the various rates of march as set forth in neatly compiled tables of logistics, without consideration of the special conditions prevailing, may easily result in tactical failure. Obstacles will arise, mishaps will occur, hostile activities will intervene—and without ample allowance for these unforeseen inevitabilities of war the most promising plans will, at the very outset, be sadly disjointed.

In war, time always presses. Leaders should, therefore, be quick in seizing upon any time-saving expedient. Where time is the essential factor, let orders go forward by staff officer or by wire rather than require front-line commanders to go to the rear. Let officers be assembled beforehand when it is known that orders are about to be received. Prescribe the necessary reconnaissance in advance when the course of action is reasonably obvious. When feasible, employ operation maps, oral orders, and fragmentary orders. In brief, the leader must utilize every time-saving device that his ingenuity and forethought can devise.

EXAMPLE I

On August 6, 1918, the 47th U. S. Infantry, in brigade reserve, was located in the northern part of the Bois de Dole, where it had prepared a rear defensive position.

During the afternoon the commander of the 2d Battalion, realizing that his organization, in all probability, would soon go forward as an assault unit, made a personal reconnaissance to the front line near St. Thibaut. Anticipating orders that night, he returned to



Example 1

the Bois de Dole, assembled his company commanders on a wooded hill that commanded a view of the front line, and acquainted them with the situation.

The 39th Infantry, then in the front line, had been trying to cross the Vesle in order to establish a line along the Rouen-Rheims Road. Casualties from hostile artillery had been heavy and the relief of the 39th appeared imminent.

Reports, received from officers in St. Thibaut, indicated that, with the exception of a few snipers along the river and in the town of Bazoche, little or no resistance would be encountered. The

Vesle was reported as "not very deep." From this information it was believed that a night relief of the front line and a subsequent move to the north could be accomplished with little difficulty.

With the aid of a map, the battalion commander then issued an oral warning order, in substance as follows:

"The enemy, supported by considerable artillery, holds the heights north of the Vesle. A few machine guns and snipers occupy scattered positions north of the Rouen-Rheims Road. The 39th Infantry reports one of their battalions across the river. Our engineers have been constructing foot bridges over the river. The river itself is twenty or thirty feet wide and not very deep. In the event we are directed to relieve the 39th Infantry, we will probably be ordered to cross the Vesle and take up a position on the Rouen-Rheims Road. If our battalion is in the assault, the boundary lines of the present 39th Infantry sector will be maintained. They are shown on the map and include the town of Bazoches. The direction of advance will be due north. Companies G and H will be in the assault echelon and Companies E and F in support; Company H on the right supported by Company E. If the advance from St. Thibaut is to the Rouen-Rheims Road, companies will form for the movement in the sunken road immediately southeast of St. Thibaut. As your companies arrive at this point you will take up whatever formation you believe best."

Throughout the night the rain came down in torrents. About midnight the regimental commander received a message to report to Brigade Headquarters, located at Chartreuve Fme. There an oral order was issued by the brigade commander directing the 47th Infantry to effect the relief of the 39th by 5:00 a.m. cross the Vesle and establish a line on the Rouen-Rheims Road. Two companies of the 11th Machine-Gun Battalion were attached to the regiment. Boundaries were the same as those of the 39th. Bazoches would be pinched out by a combined French and American advance.

Returning, at 1:00 a.m. to his command post in the Bois de Dole, the regimental commander assembled his unit leaders and issued a brief oral order, which was similar to the warning order issued by the commander of the 2d Battalion during the afternoon. The 2d Battalion was designated as the assault unit; the 3d Battalion (Regimental Machine-Gun Company attached) was ordered

in support; and the 1st Battalion was held in regimental reserve. Battalions were directed to move out at once in the order: 2d, 3d, 1st.

The regimental commander then proceeded to St. Thibaut.

Darkness and heavy rain rendered reconnaissance almost impossible.

The forethought of the commander of the 2d Battalion now served its purpose. He assembled his company commanders and informed them of the battalion's mission. He stated that no information, other than that already given, was available and that the orders he had issued during the afternoon would be carried out. He then left for St. Thibaut, after directing his adjutant to bring up the battalion as soon as it could be assembled.

At 2:00 a.m. on August 7th the regiment marched on St. Thibaut via the Fme. des Dames-Fme des Filles Road, its approach being covered by a small advance guard. No guides were furnished. The road was a knee-deep quagmire of mud and slush. Dead animals and men added to the natural obstructions of the narrow way. Slowly, and with great difficulty, the column struggled forward. The enemy continued to shell the road, but due to the darkness his fire was largely ineffective. In reply, American artillery steadily shelled the heights north of the river.

About 3:30 a.m. the 2d Battalion reached St. Thibaut, where it was met by the battalion commander. He informed his company commanders that he had been unable to obtain any additional information but that the situation looked worse than had been represented to him the previous day. In fact, the only protection against hostile machine guns and snipers lay in reaching the Rouen-Rheims Road before daylight.

The 2d Battalion moved quickly to the sunken road 200 yards east of the village, took up an approach march formation and at 3:45 a.m. moved out. Enemy artillery fire increased. The 3d Battalion, followed by the 1st, moved slowly along the St. Thibaut Road, in order to allow the 2d Battalion to clear the sunken road.

The regimental commander was extremely desirous that his assault battalion reach the Rouen-Rheims Road, north of the river, before daylight. He therefore personally directed the initial stage of the approach to the river.

The enemy evidently expected the relief, for an artillery barrage was laid on the sunken road, the roads leading into St. Thibaut, and on the village itself.

At dawn the 2d Battalion moved down a gradual slope and crossed the narrow-gauge railroad track, about 300 yards from the sunken road. A light mist hung over the ground. Advancing another 300 yards, over swampy ground, the scouts reached the Vesle River. Foot bridges reported to have been constructed by the engineers could not be located. The company commander of the right company moved forward and attempted to wade the river. He discovered that it was blocked by wire entanglements, extending from the middle of the stream to the opposite bank. Moreover, the stream was considerably deeper than the average height of a man. A few officers and noncommissioned officers managed to struggle across.

It was now discovered that the north bank of the river was wired with a line of double apron entanglements and, beyond this, with a line of spirals. Those noncommissioned officers who had managed to effect a crossing bent their energies to cutting gaps through the wire while the officers strove to get the troops across as quickly as possible.

Enemy artillery now combed the river line with mustard gas.

All men who could swim were ordered to sling their rifles and swim across. The water was soon full of struggling soldiers. Leg-gins were lost, clothing slashed to ribbons and many men badly cut about the arms and legs by the entanglements. Several soldiers were drowned.

Floating logs and similar debris were lashed together, forming improvised rafts. Men who could not swim were pulled across on these.

In order to expedite the crossings, heavy articles of equipment such as grenades, bandoliers, automatic rifle clips, etc., were thrown across. A large number of these items were lost in the river.

As the line again moved forward the mist lifted. The assaulting waves passed through the wire and immediately came under heavy enfilade machine-gun fire from the left flank.

It was now broad daylight. The two assault companies, although sustaining severe casualties, succeeded in pushing on to a line about

50 yards short of the Rouen-Rheims Road. The remainder of the regiment, however, was cut off along the Vesle by hostile artillery fire. After several days of fruitless effort, all units were withdrawn to the south bank.

From the personal experience monograph of Captain William A. Collier, Infantry.

DISCUSSION

In this example several points are illustrated with regard to time and space factors:

First, consider the situation at midnight. Brigade headquarters desired that the 47th Infantry move forward and gain the Rouen-Rheims Road by daylight. This meant that the 47th would have to march at least three miles, partly across country, at night, in a torrential rain, with a stream crossing included.

The commanding officer was called back to brigade C.P. to receive his orders. He did not get back to his C.P. until 1:00 a.m. It appears that time might have been saved had the order been sent forward instead of calling the colonel back. On his return he assembled his officers and issued his order. Thus we find another hour consumed before the regiment moved out. If the officers had been assembled prior to the return of the colonel, time again could have been saved and time, as usual, was vitally important.

Secondly, we see the valuable results of the action taken by the 2d Battalion commander the afternoon before. He had made his reconnaissance. He had gone over the situation with his subordinates. He had issued a tentative order based on the probable course of action. All that was necessary, once he found that the regimental order coincided with his surmise, was to state, "The orders I gave this afternoon will be carried out."

The 47th started on its three mile march at 2:00 a.m. It appeared just possible for it to reach the Rouen-Rheims Road by 5:00 a.m. provided the march was continuous and no obstacles were encountered.

Unfortunately, the 47th did meet obstacles—serious ones. Rain fell in torrents, the road was knee-deep in mud, dead animals and men blocked the way, the enemy shelled the road and no guides were furnished. The 2d Battalion, leading, did not reach St.

Thibaut until 3:30 a.m., did not leave the sunken road, where it changed to combat formation, until 3:45 a.m., and did not reach the Vesle until dawn. The foot bridges could not be found and further advance was opposed by enemy fire.

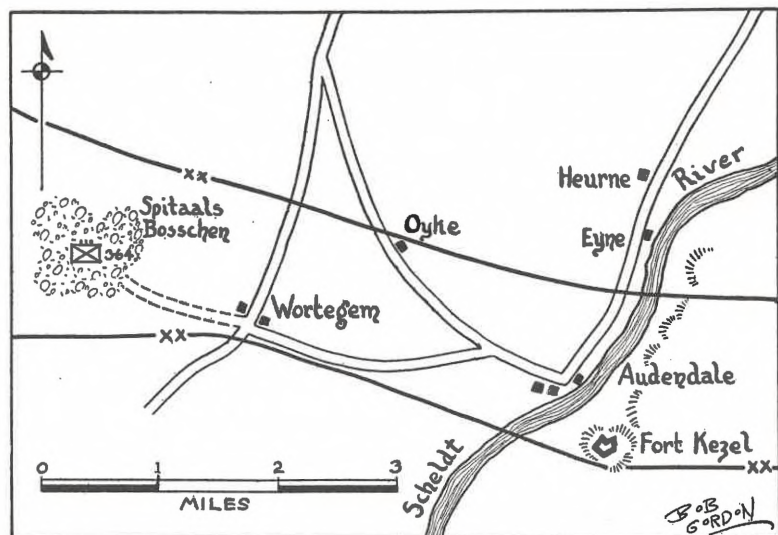
Calculations of time and space were evidently based on rates of march without allowances for unforeseen contingencies. An hour, or even a half hour, saved in launching the movement would have been invaluable in this instance where time was a paramount consideration.

EXAMPLE II

In early November, 1918, the 91st Division, attached to the French Army of Belgium, took part in the Ypres-Lys offensive.

On November 2, 1918, the 364th Infantry (91st Division) was in division reserve at Spitaals Bosschen. It had remained in position all that day.

During the evening the commanding officer of the 364th Infantry received oral orders for an advance that night. Returning to the regimental C.P. about 9:40 p.m. he met his unit commanders,



Example II

who had been previously assembled, and immediately issued his order. Within 20 minutes the 364th was on the road moving toward Wortegem. The written order for this movement reached the regiment after midnight.

The 364th had been directed to proceed to temporary foot bridges which had been thrown across the Scheldt River between Eyne and Heurne (about a mile out of the 91st Division's zone). After crossing the Scheldt it was to move south and attack Fort Kezel in conjunction with the remainder of the division which would be located along the west bank of the river.

To accomplish this mission two things were essential: first, that the regiment march approximately ten miles, cross the river, form for attack and advance approximately two and one half miles more, all under cover of darkness; second, that the attack should be a surprise to the enemy. To gain surprise, the regiment would have to reach a position close to Fort Kezel before daylight.

Arriving at a point about three kilometers beyond Oycke at 4:00 a.m., the regiment was met by guides. Here the column was somewhat delayed by a message directing the colonel to proceed to the artillery command post for a conference with the brigade and artillery commanders relative to supporting fires.

At 4:45 a.m., a half hour before daylight, the head of the column was still three kilometers from the foot bridges. Enemy artillery had been interdicting the roads. Appreciating the situation, the regimental commander ordered the battalion to march to areas east of Oycke and dig in. The crossing was not attempted.

From the personal experience monograph of Captain Frederick W. Rose, Infantry.

DISCUSSION

This regiment received orders so late that its task was almost impossible. The distance to the point of crossing was a little less than ten miles. Two and one-half miles more remained from the crossing to Fort Kezel. Using the usual rate of march by road at night (two miles per hour) it would take about five hours to reach the crossing. Following the crossing, the march would be across country at one mile per hour. This would require two and one-half hours more. The whole movement would require seven and one-

half hours of steady marching—not including the time lost in crossing.

In this case the colonel had his unit commanders assembled and waiting for him on his return. Due to this, the regiment was in motion in the exceptionally good time of twenty minutes, or at 10:00 p.m. Daylight came about 5:15 a.m. or seven and one-half hours later. Theoretically, the movement was just about possible. Practically, it was not. No time was allowed for delays caused by hostile artillery fire, for crossing the streams, for taking up the attack formation or for issuing the attack order.

The account does not explain the cause of the delays in the march of this unit, but that there were delays may be seen by the fact that at 4:45 a.m. the head of the column was still three kilometers from the crossing.

The calculation of time and space factors had been too optimistic somewhere.

EXAMPLE III

At 4:30 p.m., October 9, 1918, the 2d Battalion 38th Infantry was ordered to move from its position at Cierges, "leap frog" the 1st and 3d Battalions, which at that time were holding the Mammelle trench in the vicinity of Romagne, and attack toward Bantheville. The ridge southwest of Bantheville, which was the battalion objective, was four miles away. Darkness would fall in an hour and a half.

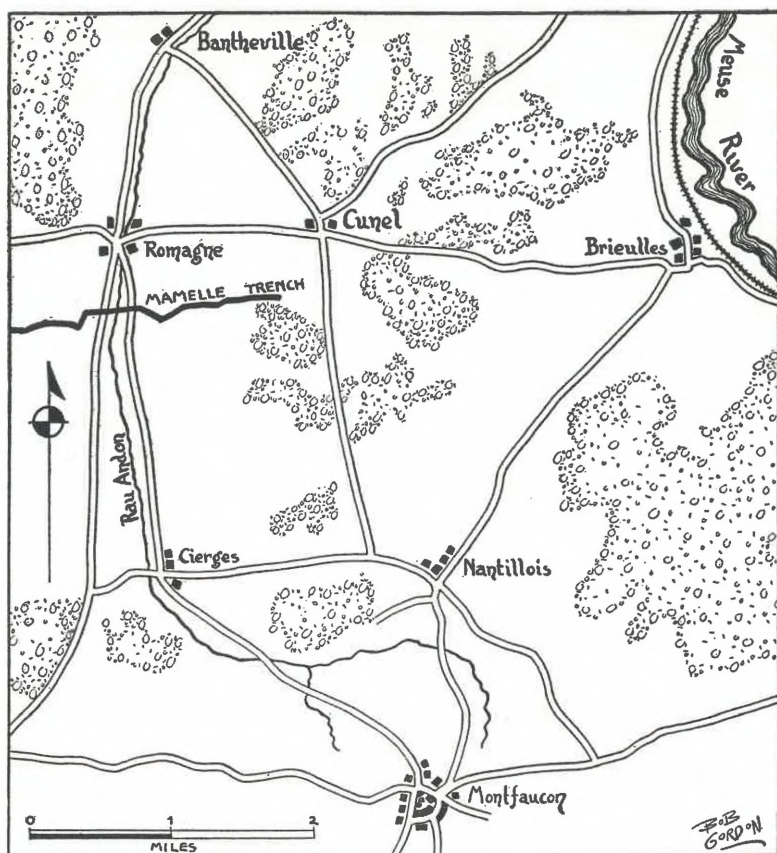
The battalion advanced over the ridges northeast of Cierges in approach-march formation. It was subjected to heavy artillery fire which necessitated breaking the units into smaller divisions. It did not arrive in time to attack that day.

From the personal experience monograph of Captain Francis M. Rich, Infantry, who at the time these events took place commanded Company G, 38th Infantry.

DISCUSSION

Here we have an attack ordered in which the objective, most obviously, cannot be reached before night. It does not appear that a night attack was intended.

The comment of Captain Rich on this phase of the operation follows:



Example III

“The attack order at 4:30 p.m. did not give proper consideration to time and space factors. The objective was four miles away, there had been no preliminary reconnaissance, and darkness was only one and one-half hours away. The briefest consideration of time and space would have shown that it was impossible to execute the order. A better plan would have been to make the approach march under cover of darkness, thus avoiding the bombardment to which the battalion was subjected, and attack at daylight, which eventually was the case anyhow.”

EXAMPLE IV

On June 6, 1918, the 23d Infantry 2d U. S. Division held a position northwest of Chateau-Thierry. At 3:15 p.m. that day division issued orders for units on the left of the 23d Infantry to attack at 5:00 p.m. The 23d was to maintain liaison with these units. The order reached the commanding officer of the 23d Infantry at 4:00 p.m. He ordered the 1st and 3d Battalions, then in front line, to attack in conjunction with troops on the left. It was nearly 5:00 p.m. before these orders were received by the battalions. Both battalion commanders assembled their company commanders at double time. Orders were issued. Captains literally gathered their companies on the run and started toward the enemy lines. The 3d Battalion attacked at 5:50 p.m. Its attack was repulsed with considerable losses.

On July 18, 1918, the 23d Infantry was attacking eastward in the Aisne-Marne Offensive. The advance had been rapid all morning but in the afternoon it began to slow down. Early in the afternoon the division commander encountered the commander of the 3d Brigade (9th and 23d Infantry Regiments) and ordered a resumption of the attack at 4:30 p.m. The brigade commander, however, did not even find his two regimental commanders until after that hour.

The commanding officer of the 23d Infantry states that he received orders to resume the attack at 5:30 p.m. This order, a division order, was dated 1:00 p.m. and was in the form of a message to the Commanding General, 3d Brigade. It directed the 3d Brigade to resume the attack upon receipt of the division order. Therefore, at least three hours had been consumed in getting it as far as regimental headquarters.

The 23d Infantry was directed by the brigade commander to resume the attack at 6:00 p.m. Fifteen light French tanks were to support the attack. Most of the units of the 23d were badly intermingled. Both regimental commanders were of the opinion that the attack could not be launched by 6:00 p.m. The tank commander wanted even more time than the colonels. The commander of the 23d Infantry conferred with the French captain commanding the tanks, and then, at 6:30 p.m., moved forward to organize the attack. He was with the assault wave when the attack

jumped off, feeling that, at this stage, personal command was necessary. The attack actually started at 7:00 p.m.

The attack of the 9th Infantry, personally lead by its Colonel, did not get under way until 7:15 p.m.

From the personal experience monograph of Major Withers A. Burress, Infantry.

DISCUSSION

It took more than five hours for the division commander to make his will felt. Battalion and company commanders had almost no time in which to make arrangements. The troops were good; the leadership was vigorous. Nevertheless, all time estimates were profoundly in error.

Within each of the attacking regiments the regimental commanders obtained coördination by personally conducting the operation. The confusion of the battlefield, particularly in resuming an attack that has been stopped, renders coördination by time extremely difficult. For small units other methods should, at least, be considered. If time is used, the allowance must be generous.

CONCLUSION

These illustrations are by no means extreme. Accounts of the World War bristle with tactical failures that are directly due to fallacious conceptions of time and space. Indeed, instances abound in which attack orders were received after the hour specified by the order for the jump-off. In many cases unpredictable circumstances intervened—circumstances that disjoined even the most generous time allowances. But it is equally true that many leaders based their calculations on parade-ground logistics, completely ignoring the inevitable obstacles that war imposes.

Commanders and their staffs must give the most careful thought to considerations of time and space. The time element should be computed from the specific conditions that will be encountered, or that are likely to be encountered, and not be taken merely from theoretical tables setting forth rates of march and time required for distribution of orders under average conditions.

Actual application of troop leading methods, as taught at our service schools, will save many precious minutes. Forethought in

making reconnaissance, shrewd anticipation of the probable course of action, tentative warning orders issued on this hypothesis, and arrangements for the instant transmission of orders, represent but a few of the time-saving devices the aggressive leader will adopt

CHAPTER XX: DIRECTION

The marching compass is the principal weapon of an infantry officer.

IN AN ATTACK, one of the leader's most important duties is maintenance of direction. Infantry Drill Regulations (Provisional) 1919, fresh from the experience of the World War, state: "More attacks fail from loss of direction than from any other cause." Whether or not this statement can be fully substantiated is not important. The important thing is that so many attacks *did* fail through loss of direction that this statement was written into post-war regulations.

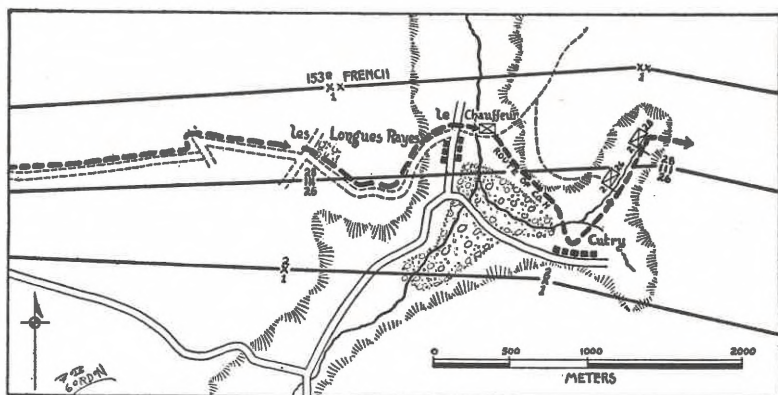
Undoubtedly the best aids in maintaining direction are clearly visible terrain features that can be seen by all men and that cannot be mistaken. Distant direction points or such features as roads, streams, railroads, ridges or valleys that run in the desired direction are invaluable. It frequently happens, however, that these natural guides either do not exist in the desired locations or else lead only part way to the assigned objective. In such instances reliance must be placed on the marching compass.

Even when guides are furnished, the responsibility for getting a unit to the proper place at the proper time is still the commander's. It will therefore pay him to check on the guide.

EXAMPLE I

On the night of July 17, 1918, the 2d Battalion of the 28th U. S. Infantry moved forward to attack at 4:35 the following morning. It moved from the vicinity of Mortfontaine at 9:30 p.m., and marched via a trail and an unimproved road to the environs of Le Chauffeur. A violent rainstorm set in shortly after the battalion got under way. A description of the march, as given by the battalion commander, follows:

"The darkness became so intense that it was impossible for the men in ranks to see those in front of them. The trail, which was bad at best from recent shelling, now became a quagmire. It was



Example 1

necessary to close the units without distance and have the men hang on to the equipment of the men ahead. Great difficulty was experienced in keeping the column from being broken, as the men were constantly slipping and falling into shell holes. As the column approached the front, the roads and trails became congested with hundreds of horses, cannon, motor trucks, tanks and artillery enroute to their positions. This added to our difficulty and it was only through the almost superhuman efforts of the officers and the men that the battalion ever reached its destination."

The battalion commander joined the column as it passed the regimental command post. At this point the battalion was broken up and the individual companies, led by French guides, proceeded toward their respective positions.

The battalion commander had the only available map. Others that were supposed to have been issued had not arrived.

As Company H started to descend into the ravine near Cutry the Germans began to harass that area with artillery fire. The guide, becoming excited and confused, promptly led the company in the wrong direction. The company commander, having neither map nor compass, did not realize this until he arrived in a town. Here he was informed by French soldiers that he was in Cutry and that there were some Americans to the east. Later he met the adjutant of the 26th Infantry, the unit on the right of the 28th, and this officer gave him general directions. The company then proceeded

northeast. At 4:15 a.m. it passed the command post of the 2d Battalion 26th Infantry, whose commander pointed out the position of Company H on the line of departure. Day was just beginning to break. The company dared not move out of the ravine to go into position lest it be seen by the enemy, and the benefit of surprise lost. Therefore, the company commander continued his march up the ravine until he reached the command post of the 2d Battalion 28th Infantry. Upon reporting to his battalion commander, he was directed to form his company near the top of the steep slopes of the ravine and be prepared to emerge at a run at H hour and close on the barrage.

The company had failed to get into position for the attack on time. By a bit of good luck it did manage to get into a position from which it could join the advance at H hour. This it did—quickly catching up with the barrage.

From the personal experience monograph of Major Clarence R. Huebner, Infantry, who at the time commanded the 2d Battalion, 28th Infantry.

DISCUSSION

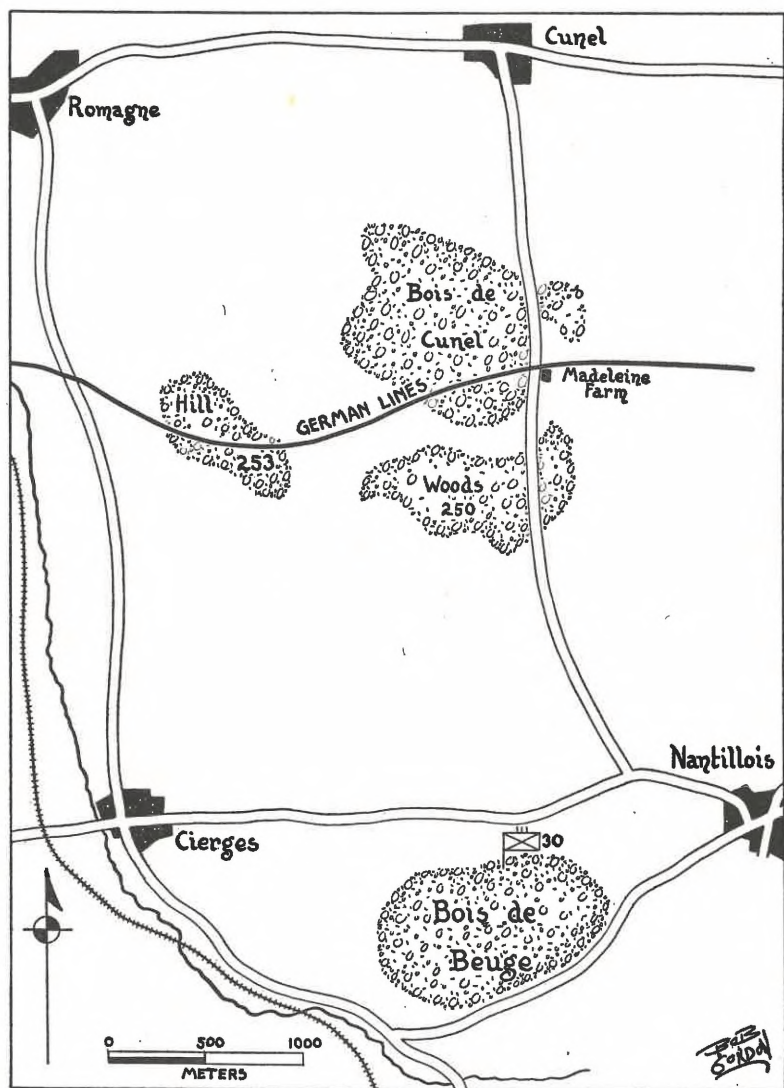
That the troops got into position at all speaks highly for the energy and determination of both officers and men. It also speaks well for the capability of the guides that most of the companies were properly led to the line of departure.

However, the guide on whom the H Company commander depended, lost direction and took the company south instead of east. *The company commander had no compass*, and did not realize the mistake. In fact, if he had not reached a town which he knew was not in his zone of action and where there were troops of whom he could make inquiries, his company would not only have been unable to attack with its battalion, but in all probability would have continued south into the zone of the other brigade of the 1st Division.

Guide or no guide, a leader should have a compass and use it. If there be a guide, the leader should use the compass as a check.

EXAMPLE II

On October 7, 1918, the Germans in front of the 3d U. S. Division held a line from Madeleine Farm through the south edge of



Example II

the Bois de Cunel and the crest of Hill 253 to the Cierges-Romagne Road. They seemed to be strengthening this position. Heavy fighting had been in progress for several days.

[253]

During this time the 6th U. S. Brigade was in reserve. On October 8 division orders directed that the attack be resumed at 8:30 a.m. October 9, with the 6th Brigade in assault and the 5th Brigade, which was then in the front line, in reserve.

The 30th Infantry, part of the 6th Brigade, was in the vicinity of the Bois de Beuge. On the afternoon of October 8 the regimental and battalion commanders made a personal reconnaissance of the front lines in Woods 250, during the course of which the regimental commander informed the battalion commanders of his general plan. Later orders issued at 10:00 p.m. at the regimental C.P. placed the 3d Battalion in assault and the 2d Battalion in support.

The 2d Battalion was ordered to be in position along the south edge of Woods 250 by daylight. Guides from the 3d Battalion were furnished for this movement. At 3:00 a.m. the battalion moved from the Bois de Beuge in column of twos and advanced across a shell-swept zone. Strict orders from higher authority prescribed that in all troop movements 50 yards' distance would be maintained between platoons and 200 yards between companies. The battalion commander believed that this was impracticable for troops moving at night over a shelled area. He accordingly closed up the column.

The route taken by the guide was not the one that the battalion commander had previously reconnoitered. About half way to Woods 250, shells began to fall in the vicinity of the line of march. Then and there the guide lost the way and the column was compelled to halt.

At this point, the battalion commander took things in his own hands and conducted the march by compass bearing. He reached the designated location in good time but here he discovered that the shelling had resulted in a break in the column and that he had with him only one and a half companies. Officer patrols were at once sent out to locate the missing units. These were eventually rounded up and as day broke, it found the entire battalion assembled in the south edge of Woods 250.

From the personal experience monograph of Major Turner M. Chambliss, Infantry, who at the time commanded the 2d Battalion, 30th Infantry.

DISCUSSION

Here we have the simple problem of moving a support battalion a short distance forward to a new position. True, the movement had to be made by night over a shelled area, but the occasion did not seem to call for special precautions to prevent loss of direction. It was natural to assume that the guide would conduct the battalion to its destination. However, as this battalion commander discovered, implicit reliance on guides is dangerous. Officers responsible for the direction of the march should use their compasses as a check on their guides. Even the leaders of subordinate units should verify the direction of march by compass. Otherwise, as in this case, rear elements may become detached and lost.

EXAMPLE III

General Petain, later commander-in-chief of the French armies, commanded an infantry brigade at the Battle of Guise on August 29, 1914. His brigade attacked late in the afternoon. General Petain had taken particular care to insure that his brigade would attack in the right direction, having given both compass bearings and distant direction points which could be easily seen.

As it grew dark, however, the difficulty of distinguishing the direction points, coupled with the fact that enemy fire was being received from various localities not directly in front, caused a portion of Petain's brigade to veer off from the proper direction. Night was falling and the situation was becoming more and more confused. The brigade seemed to be disintegrating.

To the front a burning village was clearly visible. Although it was not in the exact direction of attack, it was not many degrees off. General Petain sent orders to all units to converge on this village. By this device the bulk of his brigade was brought under control again that night.

EXAMPLE IV

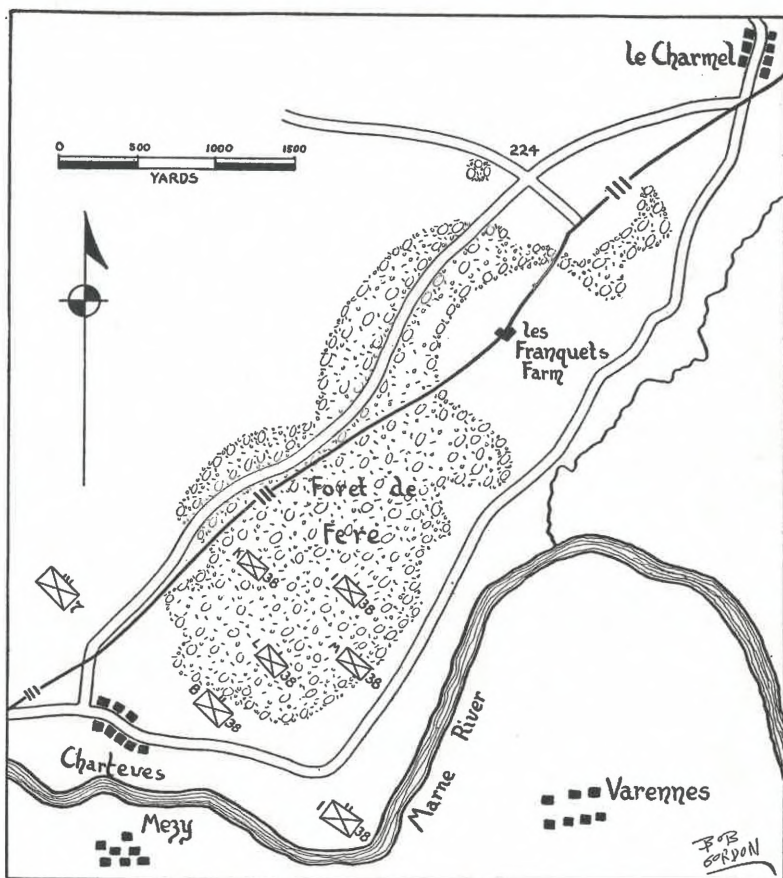
On the evening of August 21, 1914, the 53d Wurtemberg Brigade, occupying a position facing to the southwest, was ordered to attack at dawn straight to its front. At the prescribed hour it advanced to the attack with four battalions deployed in first line.

The advance had to be made by compass as a heavy fog limited visibility to forty yards.

Despite difficulties the brigade advanced several miles without losing direction. All units were under excellent control and everyone was in his proper place when the French were finally encountered.

EXAMPLE V

After repulsing the German attack on July 15, 1918, Americans and French, in turn, crossed the Marne and advanced north and



Example V

northeast. On July 22 the 3d Battalion 38th U. S. Infantry was advancing toward Le Charmel in a diamond or lozenge formation—Company I in the lead, Company K on the left, Company M on the right, and Company L following in rear. The 7th Infantry was on the left and the 1st Battalion 8th Infantry on the right, but contact had not been gained with either of these units.

The Germans seemed to be fighting a stubborn rear guard action. Their light artillery hammered at the American advance. Their planes struck at it with machine guns and bombs, and their snipers, concealed in trees, let the leading American elements pass and then fired into them from the rear.

Company K had two platoons leading and two in rear. The 1st Platoon, to the right front, was designated as the base unit of the company. A compass bearing—30 degrees magnetic—was followed.

About 8:00 a.m. the leader of the 1st Platoon noted that Company I appeared to be cutting across the front of his platoon. He reported this to the company commander. The latter, after personal reconnaissance, ordered a change of direction to 20 degrees magnetic, the bearing on which Company I was then marching.

The company had marched about fifteen minutes on the 20 degree azimuth when a corporal from the 1st Platoon, in charge of a connecting group between Companies K and I, reported to his platoon leader that he had lost touch with Company I. The company commander, upon being informed of this, sent the corporal and his party out to the east to regain contact and continued the advance—going back, however, to the original 30 degree azimuth.

About thirty minutes later Company K became involved in a heavy fight near Crossroads 224, almost due north of Franquets Farm. No friendly units were near and the company, after suffering heavy losses, finally withdrew.

At the same time the remainder of the battalion encountered serious resistance southwest of Franquets Farm. They attacked but failed to dislodge the enemy.

On this day various American units lost contact. As a result a very slight advance was made.

From the personal experience monograph of Captain John H. Hilldring, Infantry.

DISCUSSION

The loss of direction, in this instance, took Company K well into the zone of the 7th Infantry, where it became involved in a desperate fight to no purpose. Captain Hilldring, in commenting on this incident, stresses the necessity for physical, visual contact in moving through dense woods.

"Company I was responsible for direction," he says. "The other companies of the battalion should have linked themselves to Company I at close range and should have gone where Company I went. Such a formation has disadvantages but in woods it is a far better scheme to close the formation in and accept the disadvantages and losses arising from a too compact formation. To make certain that the battalion went forward as a unit, the battalion order should have read:

"Direction: for Company I, 30 degrees magnetic azimuth; all other companies will conform to direction established by Company I."

"It is true that the blame might be fixed upon the leader of the 1st Platoon, which was the base unit of Company K. However, in combat the platoon leader is a busy individual, and if he be made responsible for contact with some unit he cannot see, he must of necessity delegate that responsibility to another."

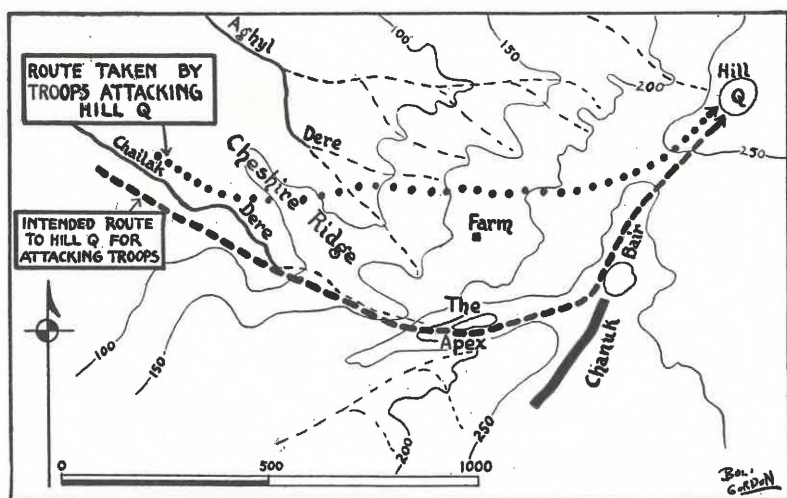
It will frequently be necessary for units to march on a compass bearing. The opportunity for error and confusion will be lessened by keeping the number of columns to a minimum as long as possible. For example, a company should move as a company as long as it can before breaking into platoons.

Visual contact in such cases may keep the unit together. The compass must take it in the right direction.

EXAMPLE VI

On August 8, 1915, the British and Anzacs were attacking what was considered the key position on the Gallipoli Peninsula. A footing had been gained on the dominant ridge known as Chunuk Bair. Two battered New Zealand battalions were intrenched on the summit. Turks and British had both suffered heavy losses.

The British plan was to capture Hill Q, northeast of Shunuk Bair,



Example VI

by an attack at dawn August 9. A heavy bombardment from 4:30 to 5:15 a.m. was planned, following which Hill Q was to be attacked by one force generally from the west and by another force from the general direction of Chunuk Bair. The latter force, commanded by General Baldwin, consisted of four battalions from three different brigades.

At 8:00 p.m. General Baldwin's force was within a mile or two of its attack objective. The intervening country, however, was extremely difficult, being traversed by high ridges and deep ravines. The slopes of the ridges were often so steep that they were impassable even for infantry and the deceptive character of the terrain made it easy for units to get lost.

Baldwin's force was located in the Chailak Dere, a deep ravine. Casualties from Chunuk Bair sent back to The Apex and thence down Chailak Dere. From The Apex a narrow saddle led forward to the advanced foothold of the New Zealanders on Chunuk Bair. Except for this, the approaches to the Chunuk Bair-Hill Q range consisted of steep ravines with corrugated, scrub-covered slopes on which no advancing line could retain its formation for half a minute.

"How on earth can we do it?" asked one of the reconnoitering officers. *The Australian Official History* answers:

"The one possible method was obvious to most of those on the spot. The assault could be made only if the battalions of the new force were marched up the Chailak Dere and right to the advanced New Zealand position, then at dawn turned to the north and straight up the crest of the ridge.

"This march would be possible, if, after a certain hour, the Chailak Dere were kept strictly free from all down-traffic—if no troops, even wounded, were allowed to descend it, and the new battalions were then led up it in single file. Some of the New Zealand brigade at The Apex explained this to Baldwin and his brigademajor and it was undoubtedly by this route that Godley (the division commander in charge of the attack) and his chief of staff intended the advance to be made."

However, the plan decided upon was to move up the Chailak Dere, cross over Cheshire Ridge, drop down into the Aghyl Dere and then climb the far side to Chunuk Bair and Hill Q. True, this route had not been explored, but on the map it seemed to be the shortest and straightest. Baldwin considered the other route, which had been urged with considerable force by some officers, as unnecessarily circuitous.

Baldwin's battalions began their advance about 8:00 p.m. Movement was slow, and guides lost their way. Baldwin then turned the column back and guided it by an easier route into the Aghyl Dere. Exactly what happened is uncertain, since many of the leading participants in this famous night march are dead. *The Australian Official History* states, "The available records at this point are very vague and defective, and the story cannot be told with certainty."

The results, however, are clear. Baldwin's force, after marching all night, was not in position to attack at the hour set. Indeed, it was nearly as far away as when it started.

"Hours later," says *The Australian Official History*, "a brave, disjointed, pitifully ineffectual attack was made by Baldwin's force." It failed with heavy losses.

From *The Australian Official History* and the Dardanelles Commission Report.

DISCUSSION

The shortest way in this case would have been the circuitous route urged by the New Zealanders. This route had the following advantages: it had been reconnoitered; it was practicable as evidenced by the fact that the New Zealanders had gone over it and sent back their wounded that way; it followed clear-cut terrain features. The Chailak Dere led up to The Apex; from The Apex a narrow saddle led forward to Chunuk Bair; from Chunuk Bair the ridge toward Hill Q was clearly marked.

The movement recommended by the New Zealanders was not easy; it would take considerable time, and upon arrival near the New Zealanders the force would have to make a somewhat difficult deployment. The plan had one outstanding virtue, however; it virtually insured that Baldwin's force would be within striking distance of its objective at dawn.

The shortest route proved to be the longest. The British Commander-in-Chief, General Hamilton, says in his reports: "In plain English, Baldwin, owing to the darkness and the awful country, lost his way."

The Australian Official History, in speaking of the decision as to the route of advance, refers to it as a tragic mistake and says: "The sum of its possible consequences is beyond calculation."

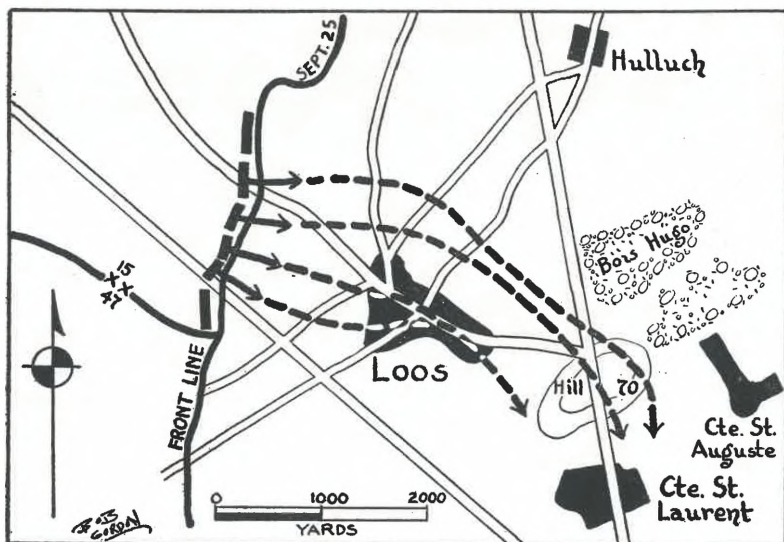
Terrain features which can be seen and followed by troops are the best insurance against loss of direction.

EXAMPLE VII

On September 25, 1915, the British launched an attack in the vicinity of Loos. Although maintenance of direction was difficult due to the similarity of such landmarks as mine-heads, buildings and oblong woods, no provision was made to keep direction by compass.

The British Official History states that in England, where there are many hedges and other obstructions, the companies in some divisions detailed, in their peace-time training, a "navigating officer," who was responsible for maintaining the proper direction. This excellent arrangement seems to have been overlooked in the war training of the new divisions.

The 9th Black Watch, 8th Seaforth Highlanders, 10th Scottish



Example VII

Rifles, and 7th K.O.S.B. were the assault battalions in the 15th Division, attacking east toward Loos. In this attack there were two towers in Loos which initially served as excellent points of direction.

During the early stages of the advance, direction was well maintained and the attack achieved considerable success. The German first position and Loos were quickly captured.

The towers, well known to all ranks, now lay behind.

The 47th Division, on the right of the 15th, was supposed to halt and form a defensive flank after reaching the vicinity of Loos but this does not appear to have been clearly understood in the 15th Division. Consequently the Black Watch, right battalion of the 15th Division, inclined to the right to maintain contact on that flank.

Resistance now seemed stronger to the right front. This, coupled with the fact that the battalions on the left flank crossed the two roads from Loos to Hulluch, which ran obliquely to their line of advance, caused these units to veer to the southeast. Hill 70 was captured and Germans were seen running to the south. Leading assault elements, now badly intermingled with reserve battalions

that had been pushed forward, turned to the south. They were promptly fired on from the front and enfiladed from the east.

Elements of some units pushed on in the proper direction. A few officers realized the danger entailed in a loss of direction and stopped on Hill 70 to reorganize. The entire division attack had disintegrated. Losses had been extremely heavy.

The British Official History says: "On reaching the top of the hill (Hill 70) a number of officers of the 44th Brigade, unaware of the change of direction, believed the houses they could see ahead of them to be those of Cite St. Auguste, and that they were still advancing eastward. Reports and sketches sent back to brigade and division headquarters during the morning showed that this erroneous view was fairly prevalent. As a matter of fact, the view east from Hill 70 and the view south are extraordinarily similar."

The history further says: "In the meantime the change of direction which had destroyed the initial cohesion and weight of the attack, and exposed its left flank, made any continuation of the advance eastward more than ever out of the question."

Later in the day a German counter attack retook Hill 70.

During the night the 63d Brigade of the 21st Division was moved up. Portions of this brigade attacked at 11:00 a.m., September 26, in conjunction with the 24th Division on its left. The men of the 63d moved over the same ground that had been covered by the left flank of the 15th Division the day before. Almost the identical thing happened.

The attack was to go east. After crossing the roads from Loos to Hulluch, fire was received from the right front and units veered to the southeast, thereby exposing their left flank to enfilade fire of Germans who were near Bois Hugo. In spite of this enfilade fire at close range the attack moved southeastward up the slopes of Hill 70. Finally, flesh and blood could stand no more. The troops broke and retired in disorder.

The right flank of the 24th Division followed the example of the troops on their right. As a result, the attack of this division dwindled to the efforts of some two and a half battalions going in the proper direction. It failed with heavy losses.

The British Official History suggests that the roads between

Loos and Hulluch, running diagonally across the direction of attack, were largely responsible for the loss of direction. It states: "The general movement was eventually at right angles to them (the roads) towards Hill 70."

From the *British Official History*.

DISCUSSION

Loss of direction was the principal thing that stopped the attacks of these three divisions. *The British Official History*, in commenting on Loos, says: "The number of occasions on which troops mistook their objectives is extraordinary. It was a difficulty that had been overcome by good staff work at maneuvers in England, even in blind country intersected with hedgerows."

The points that stand out from these experiences are as follows:

- (1) It is essential to use the compass to maintain direction.
- (2) An unmistakable direction point which can be seen by all ranks is of great value. The Loos towers helped the assault battalions of the 15th Division maintain the proper direction as far as Loos.

- (3) It is highly desirable to know what the units on the flanks are going to do. When the 47th Division, acting in accordance with their orders, halted to form a defensive flank to the right, the right battalion of the 15th Division followed suit. This helped draw the entire assault to the southeast.

- (4) When a road, a hedge, or a stream intersects the route of advance there is always a strong tendency to move forward at right angles to it. It cannot be stated definitely that the location of the roads running from Loos to Hulluch was the only cause of the change of direction by two divisions on two successive days. Unquestionably there were other contributing causes. Nevertheless, it is extremely suggestive that, in each case, immediately after crossing these roads, the advance moved forward at right angles to them, and not in the direction desired. When such features are encountered, running neither parallel nor perpendicular to the desired direction of advance, the danger signal is being waved.

- (5) Enemy fire attracts attacking troops. A unit fired on tends to face in the direction from which it thinks the fire is being received.

CONCLUSION

All terrain is difficult terrain on which to maintain direction. We have seen examples in the mining flats of France, in woods, and in the broken, hilly Dardanelles country.

Maintenance of direction is a hard job and it cannot be solved without thought and effort. The casual manner in which we sometimes see this matter handled in problems, indicates that, as the war recedes, many of its lessons, so vivid at the time, grow dim.

We see boundaries of infantry units drawn with a ruler, bisecting woods and occasionally passing a house or a road junction. To be of real value a boundary should be visible on the ground. We see directions of attack assigned that take troops diagonally over ridges, or that cut across main roads at an angle of 10 to 20 degrees.

In planning attacks this matter of direction should be kept well to the fore. If it appear that a certain plan of attack will render maintenance of direction unusually difficult, the commander may well consider an alteration in the plan itself.

Of course attacks cannot be planned only from the viewpoint of ease in maintaining direction. Small units have to go where they are told. However, since so many attacks do fail from loss of direction, infantry commanders will be well repaid for time and thought expended on the question: "How can I *insure* that my subordinates will go in the right direction?"

Maneuvers, over familiar terrain, in which a compass direction is given to subordinates may do some good, but not enough.

Exercises in which the compass is actually *needed* will be far more valuable.

CHAPTER XXI: THE PLAN

A unit must be engaged in accordance with a definite plan. It must not be permitted to drift aimlessly into battle.

IT REQUIRES perfect performance by a leader to insure that his unit is committed to action according to a clear simple plan and under favorable conditions. Indeed, it may require extreme energy and forethought to insure that his command is engaged according to any plan at all. The plan may be merely to advance with minimum exposure and locate the enemy; nevertheless, that is a plan.

We consider it axiomatic that in war there will always be a plan toward the accomplishment of which all units strive. But history is replete with instances where organizations have drifted into battle for no particular reason and with no particular plan. It is true with kaleidoscopic changes in the situation the leader's plan may, and frequently will, change, but the motivating idea behind it must remain. "Battles of which one can not say why they were fought and with what purpose are the usual resource of ignorance," said Napoleon and this indictment holds true for any pointless maneuver in the presence of the enemy.

The effective coordination of the means at hand for the accomplishment of some desired end has been a major problem since wars began. Too frequently the problem has not been solved, resulting in splendid fighting units being expended in purposeless effort or by their failure to accomplish anything at all by reason of masterly inaction.

"Lord Chatham with his sword undrawn
Was waiting for Sir Richard Strachan,
Sir Richard, longing to be at 'em,
Was waiting too. For whom? Lord Chatham."

Hundreds of similar situations are revealed in the World War. Operations of the British at Suvla Bay in August 1915 are par-

ticularly reminiscent of the fiery Lord Chatham and the redoubtable Sir Richard.

It has been well said that "in war all is simple, but it is the simple which is difficult." Misunderstandings, misleading information, late orders, the fact that troops are not actually where the higher commanders think they are, often result in units being engaged aimlessly. But, on the other hand, subordinate leaders as well as their superiors, by the exercise of forethought, by careful planning, and by good troop leading, will be able to do much to mitigate such evils.

In every operation there must run from the highest to the lowest unit the sturdy life-line of a guiding idea; from this will be spun the intricate web that binds an army into an invincible unit embodying a single thought and a single goal.

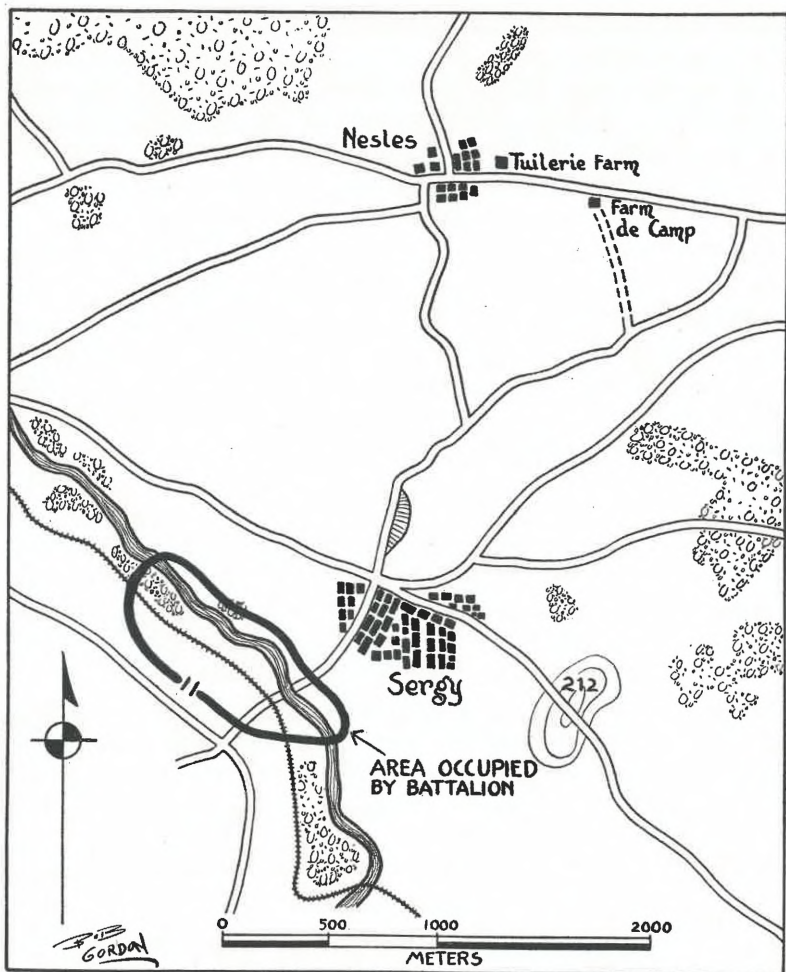
EXAMPLE I

On July 29, 1918, the 3d Battalion 47th U. S. Infantry, attached to the 168th Infantry, had advanced to a position in the valley of the Ourcq south and southwest of Sergy. The Americans had driven the enemy steadily back to positions a short distance north of the Ourcq. The 3d Battalion knew little of the situation except that it had suffered heavily during the approach-march to the Ourcq from German artillery and machine-gun fire. Some American troops seemed to be on the south slopes of Hill 212.

The battalion, with units intermingled, was extended in one long line under cover of the woods along the stream. Most of Company L had become separated from the battalion. Let us see the situation as it appeared to an officer present, a platoon leader of Company M.

"Runners were sent to locate battalion headquarters and ask for orders. Of three runners sent out only one returned. He brought the information that both of the majors, (there were two with the battalion) had been wounded and that the commanding officer of Company I was in command of the battalion. We were to organize our position and remain where we were until further orders.

"The company commander (of Company M) decided to go to battalion headquarters. He came back in an hour with the infor-



Example 1

mation that Sergy was still occupied by Germans, but that patrols were working into it; that we would make no attempt to sort out companies until after daylight in the morning. The present position was to be organized for defense.

"It was now getting dark. Fire was decreasing. It was easier to move about. Rations were collected and ammunition distributed. We were now advised that the new battalion commander had been

killed and that the company commander of Company M would take command of the battalion. The runner who brought this message was thereupon told to notify all officers that the new battalion commander would remain with Company M, and to inform them of the location of his command post.

"There was a shell crater about fifty feet in front of our line. Since it gave much better observation to our front and flanks, the battalion commander and I went out there and spent the night. Save for gas alarms, the night was uneventful. We received one report from a patrol to the effect that the troops on our left were the 1st Battalion, 47th Infantry. This was our first knowledge of the fact that the 1st Battalion was in action with us.

"At 7:30 a.m. on the 30th a runner from the 168th Infantry located us and directed the battalion commander to report with his officers to the commanding officer, 168th Infantry. He stated that we could find the headquarters by following the creek to the other side of the village. The battalion commander took me with him. On the way we picked up four officers. We reported to a major of the 168th Infantry southwest of Hill 212, who gave us the following oral order:

"You will form your battalion and move through the village. When you come to the sunken road leading out of the village, move due north, keeping the road as your right guide. A barrage will be fired. Keep as close to it as possible. You will find a lot of artillery and machine-gun opposition but do not let it stop you. Continue the advance to the next village, Nesles, and consolidate your line on the north side of the village. The barrage starts at 8:00 a.m. Move out promptly at 9:00 a.m."

"It then being after 8:00 a.m. and no barrage being fired, the question was asked if the time to start the barrage had been changed. We were informed that there had been some delay in receipt of the firing data, but that the barrage should be working beyond the village at that time.

"The officers of the 47th then returned and organized three platoons of men from Companies I, K, and M. I say platoons because the strength averaged five squads. (There were some men of the battalion not included in these three platoons. They were on the left under officers of Company K. A runner was sent to this

group with an order to advance on the left of the village and join the battalion at the northern exit).

"The column then moved out, the order of march being I, K, and M. The formation was column of squads. No battalion attack order had been issued. We moved through the village with no difficulty but came under machine-gun fire as we reached the northern exit. As the two leading companies moved up the sunken road, I could see that quite a few of the men were being knocked down, so I took my company into the field on the left. Here, too, we received considerable fire. I put the company into skirmish line. I could not locate the battalion commander or his adjutant although I had seen them get out of the road when the leading companies began to get into trouble. The following day I learned that the battalion commander had been killed and that his adjutant died of wounds that night. I also learned that the leader of the first company was badly wounded and that the leader of the second company was dead."

The attack of Company M progressed 500 yards in about two hours. At the end of this time the company commander, seeing no other troops near, stopped the attack and held his position. At dusk he received orders to withdraw Company M to the sunken road near the village, which he did. Here the survivors found that there was apparent conflict of opinion as to why the 3d Battalion had attacked. Indeed, there appeared to be considerable doubt whether it had been intended to attack at all.

From the personal experience monograph of Captain Howard N. Merrill, Infantry, who at the time commanded a platoon of Company M and later Company M.

DISCUSSION

When we examine the attack of the 3d Battalion the impression we get is one of utter aimlessness. Let us grant that orders were received late and were incomplete. Let us grant that the battalion did not have time to assemble all of its elements, that it was in poor condition to attack, that promised artillery support did not materialize, that the majors of the battalion were casualties, that enemy information was vague, that it was not known what other friendly troops were to do. Such a state of affairs is in the very nature of war. In this case it appears that some of the adverse

factors could have been avoided, but let us forget that for the moment.

The attack order received by the battalion can be summed up as, "Attack at 9:00 a.m. toward Nesles with your right on the road." What the companies of the battalion now needed to know was, "What part are we to play in this battalion attack? Where do we deploy? What company is on our right? Who furnishes flank protection? Who is in reserve?" In other words, a battalion attack order, no matter how brief, was desperately needed. Instead, the battalion commander issued what was, in effect, a march order.

The battalion moved to the north edge of Sergy in column of squads and there came under fire. At once everyone did what seemed best to him. There was no coördination of effort—no plan—and the battalion promptly ceased to function as a unit. It drifted blindly and aimlessly into battle. Company M, on its own, moved to the left and attacked and for the rest of the day labored under the impression that it was fighting the war single handed.

A brief order regulating the deployment before the battalion came under fire would unquestionably have made a great difference. That time for this was short was no excuse.

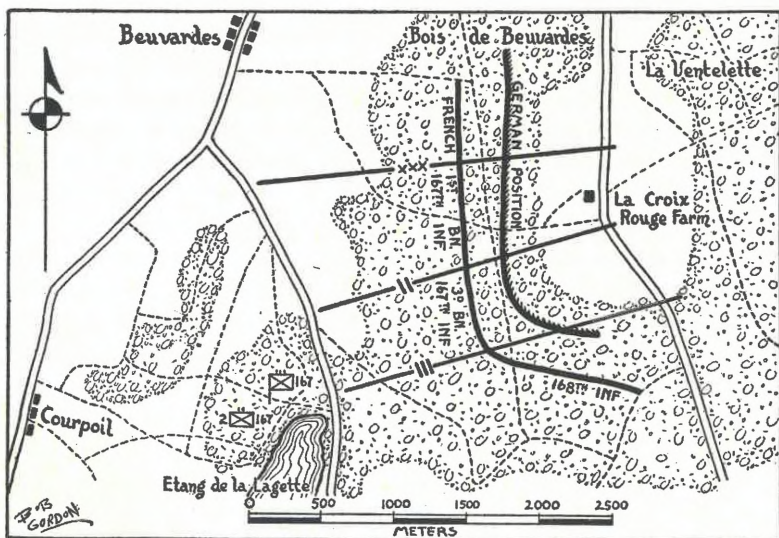
An attack should have been anticipated. The enemy was being driven back and the battalion was close to his position. What could be expected but an attack?

It is obvious that the battalion commander should have made a point of getting in touch with the 168th Infantry, to which he was attached, in order to learn the plans for the next day. Also, much could have been done during the night toward effecting a reorganization of the battalion. So, too, the most perfunctory reconnaissance would have disclosed the fact that the Germans were still close at hand, and thereby averted the movement in the sunken road.

The battalion was in its first fight. It lost 25 officers and 462 men. Its courage was marked. *But courage is not a substitute for experience and training.*

EXAMPLE II

On July 25, 1918, during the Aisne-Marne Offensive, the 167th U. S. Infantry relieved elements of the 26th Division northeast



Example II

of Courpoil. The 1st and 3d Battalions, each with one machine-gun company attached, were in the front line. The 168th Infantry was to the right of the 3d Battalion and the French on the left of the 1st. The 2d Battalion was in reserve. The terrain was heavily wooded, except for some cleared area in front of the 1st Battalion. The relief was completed late in the afternoon. Enemy artillery fire was heavy during the night and continued throughout the next day.

Early on the 26th, front line battalion commanders sent patrols forward to gain contact and locate the enemy line. At 8:00 a.m. the patrols returned. Both had suffered casualties. They reported that the enemy, with numerous machine guns, was about five hundred yards in front of the American line. Since information received from the 26th Division stated that the enemy was four or five kilometers away, this report was immediately forwarded to higher authority.

The same morning, the regimental commander, accompanied by his battalion commanders, inspected the front line. During this inspection he oriented battalion commanders as well as company commanders on a proposed plan of attack. In fact, he issued what

amounted to a tentative attack order, which, to be put into execution, required only confirmation and designation of the hour.

The direction of advance, probable objective, (which the regimental commander said would undoubtedly be La Croix Rouge Farm and the woods beyond) and the mission of each battalion were covered. Positions from which the 37-mm. guns and the Stokes mortars were to support the attack were specified. The aid station, the munitions distributing point and the regimental command post were located. Each company knew what it was to do.

Shortly after these arrangements had been completed, the regimental commander was directed to report to brigade headquarters. Expecting to receive an attack order, he ordered the battalion commanders to assemble at the regimental command post to await final instructions.

The brigade order for an attack was issued to assembled regimental commanders at 4:20 p.m. at Courpoil. The order called for a two-hour artillery preparation. H hour was designated as 4:50 p.m.

The regimental commander, 167th Infantry, pointed out to the brigade commander that the artillery could not comply unless H hour was changed. He further stated that the French commander on the left of the 167th said he had no orders to attack. The brigade commander replied:

"We will attack as ordered and be sure you jump off at 4:50 p.m."

The colonel of the 167th immediately issued his oral attack order to his executive who was waiting with a motorcycle side car to rush it to the assembled officers at the regimental command post. The order was as follows:

"H hour is 4:50 p.m. Tell battalion commanders to attack as we planned this morning. There will be no artillery preparation. Caution Major Carroll to place a platoon to protect his left, as I don't believe the French are going to attack."

The battalion commanders received the order at 4:42 p.m.

The regiment attacked on time, made a successful advance and captured 305 prisoners and 72 machine guns. The 168th on the right attacked somewhat later. The French did not attack.

From the personal experience monograph of Colonel William P. Screws, Infantry, who at the time, commanded the 167th Infantry, the Alabama Regiment of the 42d Division.

DISCUSSION

Owing to the foresight of the regimental commander, the 167th Infantry was enabled to attack on time. In anticipation of an attack he had carried his preparations to an extreme. Fortunately, his tentative plan was in full accord with the instructions he subsequently received.

In open warfare, anticipation to this extent is seldom advisable. Nevertheless, if the general situation clearly indicates the order that can be expected, a subordinate leader may well make many preliminary provisions. Reconnaissance, contact with adjacent units, obtaining enemy information, feeding a hot meal to the troops, issuing extra ammunition, dropping packs, arrangements for the instant transmission of orders, and the orientation of subordinates are matters that need not await the receipt of an attack order. Indeed, such steps will frequently change many a laboriously logical explanation of failure to comply with orders to the succinct and satisfying phrase . . . "Attack launched on time."

EXAMPLE III

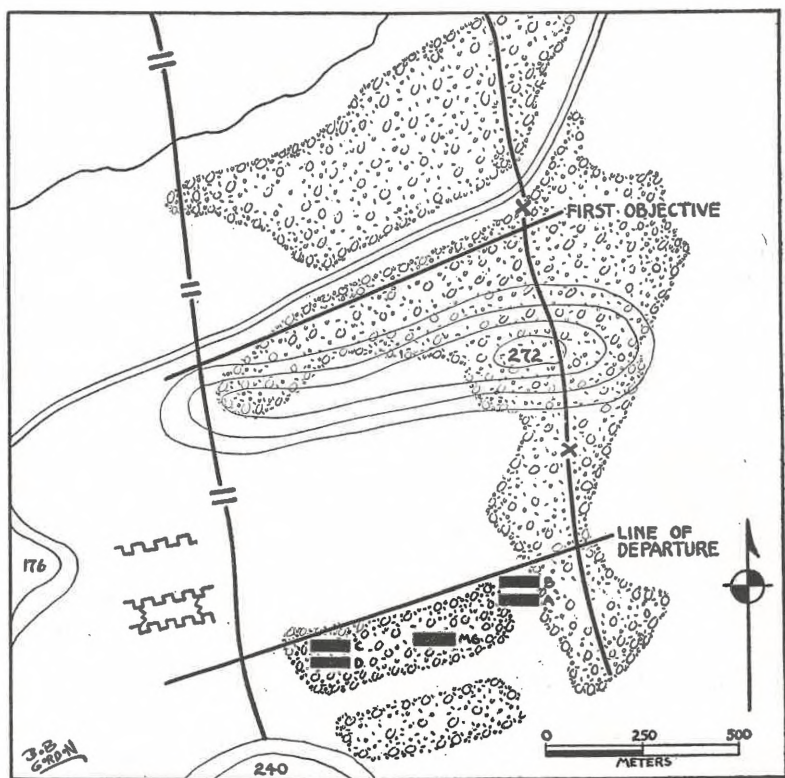
On October 9, 1918, the 1st Battalion of the 16th Infantry participated in an attack of the 1st Division in the Meuse-Argonne offensive. The first mission assigned the battalion was the capture of Hill 272. This hill was strongly held and several previous attacks against it had failed in the face of a well prepared and highly coordinated system of protective fires.

The attack was ordered to jump off at 8:30 a.m. behind a rolling barrage. One company of the 1st Gas Regiment was directed to fire a thermite concentration on a German machine-gun nest located near Hill 176 to the left front of the battalion.

The general tasks of the battalion were indicated by higher authority. The plan of the battalion commander was essentially as follows:

Companies B and C in assault, B on the right, each having one-half of the battalion zone.

Companies A and D in support, A on the right, to form just in rear of the line of departure. Both companies to be well closed up to escape the German protective barrage known to be registered on the forward slope of Hill 240.



Example III

To charge Companies A and B with the protection of the right flank.

Company C to be particularly alert for activity near Hill 176 in the zone of the unit on the left.

Aid station in a shell hole to the right front of Hill 240.

Command post between Companies A and D. The battalion commander to advance initially with Company C.

The attack jumped off in a thick fog. The Germans, however, realizing that something was afoot called for their defensive barrage which came down in rear of the support companies who held their position until the assault companies had gained distance.

Soon after the attack started Company C received intense machine-gun fire from Hill 176. The left half of the company wheeled

toward the hill and vanished in the fog. The remainder of the company continued to the north. The battalion commander immediately confirmed this action, directing the left assault and left support platoons to continue their efforts against Hill 176 and then to advance, protecting the left flank of the battalion. When Company D came up he ordered it to continue toward Hill 272, since the capture of that hill was the battalion's principal mission.

In the fog companies lost contact, but all moved forward. Arriving at the foot of Hill 272 the battalion commander halted Company D and made a reconnaissance. This disclosed the fact that all companies had arrived at the foot of the steep slope. Company B, on the right, had advanced straight to its proper position and Company A had come up abreast of it on its left. Two platoons of Company C were to the left of Company A and Company D was some distance to the left of these. Having determined the disposition of his companies, the battalion commander issued oral orders for them to move forward and capture that part of the hill in their immediate front. Following this they were to spread out to the flanks until contact was complete within the battalion and all parts of the hill occupied. The companies were told to get to the top of the hill and stay there at all costs.

A foothold on the hill was gained by each company working a small group up the hillside between German machine-gun positions. The footholds thus gained were then enlarged by a continuation of this infiltration. At 11:00 a.m. the hill fell.

From the personal experience monograph of Major Charles W. Ryder, Infantry, who at the time commanded the 1st Battalion 16th Infantry.

DISCUSSION

The attack of this battalion appears to be "just another frontal attack." The artillery fired and the infantry moved forward to exploit the effect of the fire. The fog was a bit of luck. What is there noteworthy about the affair? There is this. The battalion was commanded. It acted according to a definite plan.

The plan was not merely a routine, stereotyped announcement of which two companies would be in assault and which two in reserve. It contained several ideas. First, it foresaw where the German protective fires would be dropped and arranged to mass the battalion well forward so that even the reserve companies would

escape this fire. Nothing revolutionary, perhaps, but still not the usual thing.

Second, the battalion commander foresaw what was going to happen on his left. Accordingly he took action to protect this flank by orders to Company C and by personal intervention there at the start of the fight.

Finally, at the foot of Hill 272 we see the battalion commander getting his units in hand. We hear him revise his plan, bringing it up to date, thereby insuring a battalion blow instead of a series of haphazard, disjointed efforts.

Thus, even in a frontal attack behind a rolling barrage, one of those cut-and-dried "once more, dear friends, into the breach" affairs, there is need for an infantry unit to have a plan and there is room for its commander to have an idea.

CONCLUSION

We have examined a case or two where units have drifted into battle. We have seen what happened to them. Undoubtedly it would be going too far to say that every unit which becomes engaged without a definite plan is doomed to defeat, for occasionally the sheer valor of the troops has been able to surmount passive leadership. In such cases, we have a "Soldier's Battle." But even in those rare instances where such battles achieve a certain measure of success, they are seldom decisive, since full exploitation is impossible. Despite the rare occasions of partial success, we must face the immutable fact that planless action is an open invitation to disaster.

We have examined other situations where the foresight of the leader enabled the unit to attack under conditions far more favorable than would otherwise have been the case. In these, success was achieved not by transcendent flashes of genius but merely by having an intelligent plan.

Insuring teamwork and coördinating the attack is the responsibility of the leader. Whatever the method adopted, he must guard against a disjointed, piecemeal effort. He can best accomplish this by keeping ahead of events—by anticipating them, rather than by suffering them to drag him along in their wake.

It is always well to keep in mind that one fights to gain a definite end—not simply to fight.

CHAPTER XXII:

SCHEME OF MANEUVER AND MAIN EFFORT

There should be no attack without a scheme of maneuver. The main effort should strike the enemy's weakness.

ALL MEANS—reserves, fire support, ammunition—are concentrated for the decisive stroke. Greater mobility and economy of force at non-decisive points permit the concentration of superior forces at the decisive point. To make the main effort a real knock-out blow, the economy of force elsewhere must not only be noticeable; it must be extreme.

The idea of a main effort usually stands out most clearly in the case of larger units; but it applies to the smaller units with equal force. It is not necessary to be a regimental commander in order to make a main effort. A company or a platoon will always be able to note some points, weaker than others, in the hostile position to its front—usually places where it can approach the enemy under cover. Here the platoon tries to advance, here it makes its main effort. The flanks and rear of the enemy are weak points, hence strike at them when they can be reached. A small unit, maneuvering to take a machine gun, tries to get men in its rear or on its flank. In other words, it strives to strike the weak point.

To determine the location for his principal effort, the leader will try to discover those parts of the terrain where the enemy cannot employ his weapons to advantage. These will be all the more indicated as desirable locations for the main effort if an attack there finds facilities to realize powerful fire support and to be supported by tanks. Thus strength will strike weakness. Salients of the enemy position often fulfill these conditions.

Having made his choice, the leader's dispositions must correspond to his idea of maneuver. The density of deployment is greater where the main effort is to be made. Troops must be available to assure continuity of the effort and to permit the leader to have freedom of action to deal with the incidents of battle. All

available fire support is concentrated to assist the main effort.

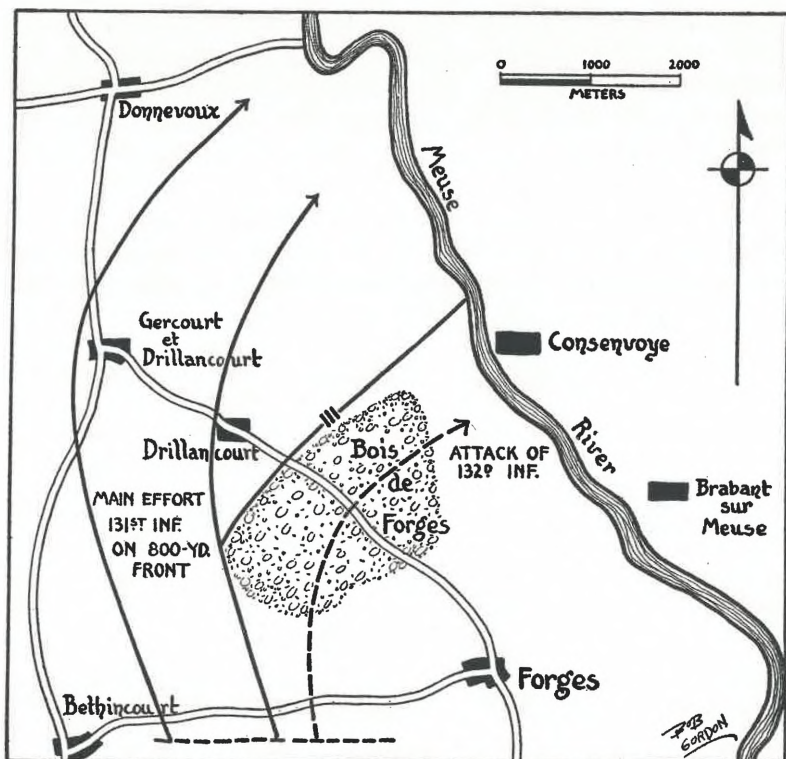
The scheme of maneuver of small infantry units is simple and does not look too far in the future. It is concerned with the enemy resistance which is close; new decisions, based on the new situation, must be made later. For example, when confronted with a vague situation, or unsuitable terrain, it is possible that no definite idea will stand out. In such a case, there will be no true main effort at the start; it will be withheld. The scheme of maneuver will simply be an advance in order to determine what is in front, with the unit commander retaining control and freedom of action. His dispositions will be such that he will be able to reserve his main effort until the situation warrants the commitment of the bulk of his force.

EXAMPLE I

The 66th Brigade, 33d U. S. Division, attacked on September 26, 1918, in the opening of the Meuse-Argonne offensive. The other brigade of the division was initially held in reserve. The right of the 33d Division rested on the Meuse. To its front lay the Bois de Forges, a thick wood covering one side of a formidable height visible at a considerable distance. No attack was to be launched east of the Meuse so the flank of the division would be exposed to fire from across the river.

The plan of attack was as follows: the left regiment of the 66th Brigade, the 131st, was to make a rapid advance, and quickly reach the open ground east and north of Gercourt et Drillancourt in order to assist the right regiment in the capture of the Bois de Forges. The barrage in front of the 131st was to advance faster than in front of the 132d. "The whole theory of the attack is by echelon with the left in advance," said the division order. The 132d Infantry was to advance and clean up the Bois de Forges from the southwest. Toward the latter stages its direction of attack was to be almost due east. No attack on the Bois de Forges from the south and southwest was planned.

The 131st Infantry and 132d Infantry were to attack side by side at first, each with two battalions in assault. The 132d, however, was to make a sharper turn to the right than the 131st; the interval thus formed was to be taken care of by reserves. The 131st had a



Example I

zone 2,000 meters wide, but it actually followed a rolling barrage about 800 yards wide.

A machine-gun barrage and artillery fire supported the attack which was preceded by a powerful preparation. The machine-gun barrage helped deceive the Germans as to the direction and front of the attack. This fire neutralized the southern edge of the Bois de Forges which was not attacked.

The brigade was successful, and by about 10:00 a.m. the two attacking regiments had reached their objectives and were along the Meuse facing east and northeast. They had captured 1,400 prisoners. Losses in the two regiments were about 250. The report of the brigade commander states:

"The 132d Infantry, on a front of about two kilometers, at-

tacked the enemy positions in front of and in the Bois de Forges from the southwest, and making a turning movement to the east while in the woods, using the roads in the center of the woods as a guide and a dividing line between battalions, came out at the objective exactly as planned in the orders of the brigade at 10:00 a.m.

"This maneuver struck the enemy's works in the flank and rear, took them entirely by surprise and also was responsible for the few casualties inflicted upon the troops."

* * * * *

"This entire engagement was particularly interesting because of the fact that it was an action planned and executed by a brigade as a unit. It was entirely successful, owing first, to the courage and dash of our splendid troops and second, because the plans had been carefully worked out and studied by all concerned and during the action these plans were followed with marvellous exactness."

From the *History of the 33d Division*.

DISCUSSION

The two regiments of the 33d Division on this day took about five prisoners for each casualty they suffered. The regiments swept through and were on their objective in a few hours.

The 66th Brigade had other troops on its right although these did not attack. So it was an interior unit, making an attack against enemy positions to its front. But that did not keep it from *striking in an unexpected direction at enemy weakness—from having a main effort*. It did not spread troops all over its zone. It did not smash up against the Bois de Forges as the Germans expected. In portions of the zone no troops attacked at all. Any Germans between Forges and the Bois de Forges were in a trap if the main attack went through, as it did.

The 66th Brigade was not making the main effort of the American attack; its mission was rather one of flank protection. We see here a main effort within an attack which itself is not a main effort.

The main effort is usually characterized by the massing of many reserves behind and much fire in front of the attacking troops and by the assignment of comparatively narrow zones of action. In

this case we see a regiment with two assault battalions make a main effort on a front of approximately 800 yards.

EXAMPLE II

The 1st Battalion, 412th French Infantry, on October 11, 1918, had reached the Oise River. Germans held the east bank. Despite the fact that the French battalion held a front of three kilometers, its mission was to seize the crossings of the Oise and be prepared to pursue the Germans. The latter were holding strongly, but it was thought that due to the general situation, they might withdraw.

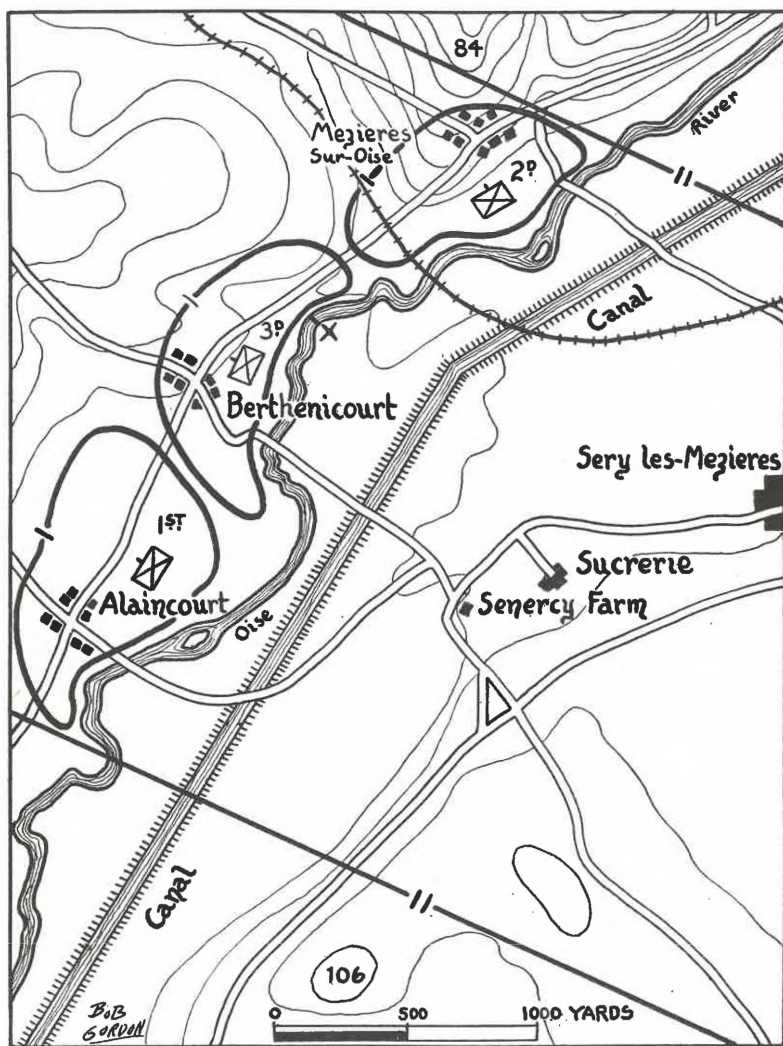
Efforts on the 11th and 12th failed to gain the crossings. A stronger attack was launched on October 13, and again the battalion failed completely.

On the afternoon of October 13 this battalion occupied a front of some three kilometers between Alaincourt, inclusive, and the vicinity of the church of Mezieres-sur-Oise. The rifle companies were abreast and were disposed as shown on the sketch, before the four groups of crossings in the zone of the battalion. The twelve machine guns of the battalion were located so as to fire on these crossings. In addition there were some five extra machine guns they had picked up that were emplaced to fire. A Stokes mortar and a 37-mm. gun were also attached to the battalion.

The information at hand indicated that the enemy defense consisted of:

1. An advanced line on the Oise, constituted of groups covering each crossing, with patrols maintaining contact between the groups.
2. A continuous line of resistance on the eastern bank of the canal.
3. Reserves at Senercy, Sucrerie, and the west edges of Sery, with German artillery supporting the defense.

The terrain in front of the battalion was flat but covered with vegetation for some distance. The principal branch of the Oise was fifteen to twenty yards wide, and constituted an appreciable obstacle. Abundant vegetation and overhanging boughs prevented location of small enemy groups. The Oise seemed to be several meters deep. The small branches of the Oise were fordable, as was



Example II

the canal. All the bridges that the battalion could locate were demolished, more or less completely. Each one was also guarded by Germans with machine guns.

At the slightest movement near the river bank enemy fire broke

out, coming from hidden places and searching everywhere. Losses were added to losses without any success being attained. The higher command, believing it had to deal only with a German rear guard, had been impatiently calling on the infantry to press forward. As night fell the battalion received orders prescribing a renewal of the attack by the entire division the next morning at 8:00 a.m. The 1st Battalion 412th Infantry was again to be in assault battalion.

Shortly after dusk a reconnoitering patrol discovered a footbridge at X, hitherto hidden by overhanging branches. The patrol leader crawled across and his men followed. Two German sentries were surprised and fled. The footbridge, however, was blown up. The patrol moved forward and surprised the German post at the railroad bridge. After a fight the Germans withdrew. The patrol leader posted his men so as to form a small bridgehead near X, swam back across the Oise and informed the battalion commander of the situation.

The battalion commander at once decided to throw troops across the Oise near X, form a larger bridgehead, and attack in the direction: canal bend-Sucerie. A message was sent to the regiment stating that the battalion intended to handle the whole affair by its own means, and asking that all friendly artillery fire cease in front of the battalion, except as requested by the battalion commander himself.

The bulk of the battalion had crossed the Oise by 2:00 a.m. Let us examine its attack at dawn to the southeast. The entire 3d Company, three platoons of the 2d Company and two platoons of the 1st Company constituted the attacking force and advanced on a frontage of less than 500 yards. The other three rifle platoons of the battalion were spread out on the remaining 2,500 yards of the battalion front, with the mission of assisting the attack by fire.

Seventeen French machine guns, every gun that the battalion had, were located on the high ground west of the stream, and supported the attack by overhead fire. Each gun was given a mission of neutralizing a definite portion of the zone between the river and the canal and between the Berthenicourt-Senercy Farm Road and the railroad. A captured German machine gun was added to the group furnishing fire support.

The Stokes mortar from near Mezieres was to fire on the railroad bridge over the canal. The 37-mm. gun, from positions near Berthenicourt, was to fire on the canal bridge on the Berthenicourt Road and on Senercy Farm. A 75-mm. gun had previously been located north of the battalion's zone. It was driven from its emplacement by German fire, and its commander reported late on the night of October 13 to the 1st Battalion commander. It was placed, by night, on Hill 84, in a position known to the battalion commander, with the mission of enfilading that portion of the canal in front of the attack as soon as it was light enough to see.

The fire of the 75-mm. gun was to be the signal for all other fires to open. A short time thereafter the assault would be launched on rocket signal. In addition to the fire support described, the battalion commander had caused each company to constitute batteries of VB grenadiers, each battery having a precise target on the canal. He also arranged for the platoons holding the front to protect the flanks and assist the attack by fire.

The attack was launched at about 7:15 a.m. according to plan, and was a complete success. The battalion advanced on a narrow front, captured the hills east of the Oise, and other troops were pushed across the river behind the successful battalion.

From Infantry Conferences at the Ecole de Guerre by Lieutenant Colonel Touchon, French Army.

DISCUSSION

The actors state that in all this there was not the reasoned method which we are pleased to find there today.

"Because of the urgencies of the situation," said the battalion commander, "it was necessary to move fast, to muddle through; no written orders, but only oral orders, fragmentary orders, many of them, hasty orders given as one went from one place to another, the whole scene resembling that which probably exists on the deck of a sinking ship."

Let us note the results of this activity, feverish activity perhaps, but also methodical activity.

Nine rifle platoons were massed in a main effort on a front of less than 500 yards; the rest of the battalion zone, more than 2,500 yards, was held by three platoons, which had a mission of flank protection and fire assistance to the main effort.

The main effort was supported by 18 machine guns, a 37-mm. gun, a Stokes mortar and a 75-mm. gun—by everything that could fire that was in the neighborhood. Extra machine guns were used to support the attack and every weapon *fired*; the fire weapons did not merely tag along. All the fire support was concentrated on the area in front of the main effort and on the terrain immediately to its flanks.

That out of the disorder came a coherent combination speaks much for the quality of the reflexes of the chief and his subordinates during that hectic night of preparation.

The action of the leader dominated everything; he had devoted so much time to personal reconnaissance that when the opportunity came, he was enabled to assign positions and missions to all his machine guns and to a 75-mm. gun in the dark, and it worked.

He knew his terrain, and the main effort of this battalion was a real main effort.

EXAMPLE III

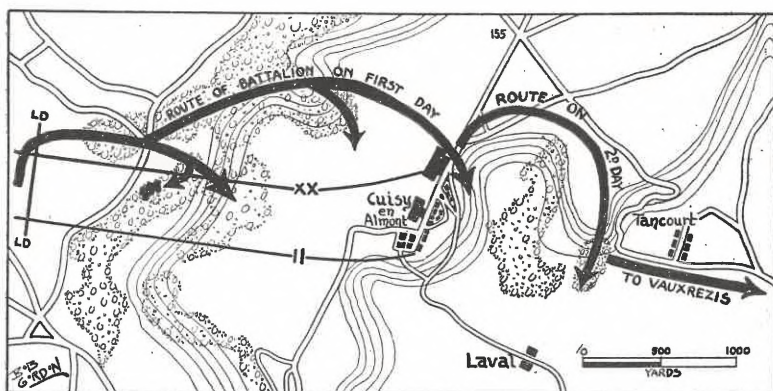
The 4th Battalion, 365th French Infantry, on August 20, 1918, attacked toward the east in conjunction with other troops. Its zone of action, indicated on the sketch, was narrower than that of adjacent battalions. Its mission was to take Cuisy-en-Almont.

Just beyond the road and immediately in front of the battalion was a fortified work, which had not been reduced by the artillery preparation. The battalion commander believed that machine-gun fire from here might prevent the attack of the battalion from even getting under way. He therefore adopted the following plan:

The 15th Company, with one platoon of machine guns, would be the only unit of the battalion to move out at H hour. This company, going into the zone of the unit on the north, and utilizing the cover of the woods and the ravines, would swerve to the south and take the fortified work in the rear.

Upon its capture, the rest of the battalion would attack. The 14th Company, following the 15th, would advance via the wooded slopes that border the northwestern portion of the Cuisy-en-Almont plateau, and attack Cuisy from the north.

The 13th Company would maintain contact with the unit on the right and outflank Cuisy on the south.



Example III

The battalion commander with the machine-gun company would move straight toward Cuisy (between the 13th and 14th Companies).

The attack was carried out according to plan. It was highly successful, the battalion capturing 530 prisoners and 24 machine guns. At the start of the attack the companies of this battalion averaged some 60 effectives.

The next morning the battalion was just east of Cuisy. Its commander, with his command group, was making a personal reconnaissance near the east edge of the town. The ravine in front of the battalion was found to be well covered by enemy machine-gun fire.

At this moment (about 10:00 a.m.) the battalion commander saw an avalanche of shells fall suddenly on the bare plateau to his left front which was held by the Germans. He concluded that the French units on his left were launching a powerful attack. Although he had not been notified of any such attack, he at once gave the following order:

"Our left has just attacked; we must keep touch with it.

"The 15th Company will cling to the flank of the 127th (unit on the left). The 13th Company will follow the 15th. The 14th will hold Cuisy temporarily. Two platoons of machine guns will support the movement.

"All our movement will be made without going down into the ravine.

"Our objective is Laval, but Laval will fall of itself if we turn the Cuisy ravine by the north and then swerve south. We will thus gain the spur east of Cuisy. From there we will take Tancourt and Vauxrezis.

"We will progress by individual movements, by infiltration, avoiding the ravines and outflanking them on the north. The Germans still hold the Bascule crossroad (155), according to latest information.

"The 15th Company will send a patrol, commanded by a very energetic leader, to determine if the 127th has really advanced. Our attack will start on my order."

The patrol found that the 127th was attacking, and the 4th Battalion 365th advanced in turn. It again met with success and without loss captured an entire German machine-gun company which occupied the spur east of Cuisy. These machine guns were pointed west and southwest, covering the ravine of Cuisy and Laval. The battalion then continued the advance.

The division commander, who had gone forward, met a runner coming back with a message. He glanced at it.

"12:30 p.m.—Lieut. Gilbert (13th Company) to the Battalion Commander.

"I am at Tancourt. We have gone 300 meters beyond the village.

"The 5th Battalion must be still at Laval, by the sound of the firing. No liaison with the 14th and 15th Companies. I push on toward Vauxrezis. I have met some resistance which has been reduced. Prisoners were sent back in three groups, altogether 70 to 80 men. The German machine guns were left on the ground.

"Having no resistance in front of me, I am advancing until I get contact."

The division commander took a pencil and scribbled on the message:

"My congratulations to Gilbert. That's the way to make war."

From "The Command of Small Units in Combat" by Major St. Julien, French Army, appearing in the November, 1927 issue of the *Revue D'Infanterie*.

DISCUSSION

On two successive days this battalion, taking part as an interior assault unit in a big attack on the West Front, scored a striking success. The prisoners taken were two or three times the effective strength of the battalion.

In each case the battalion did not attack in its own zone. It maneuvered in the zone of the neighbor, making its main effort outside its own zone of action.

In each case the battalion struck at enemy weakness. In one case it went through the wooded ravines; in the other case it avoided the ravines and chose to move over a bare plateau.

It went through the wooded ravines in the first case because it seemed that thus it could avoid enemy fire and take the enemy defensive works in the flank and rear. On the second day the ravine in front was obviously that part of the terrain which the enemy had covered particularly well, so the battalion moved, man by man, over the open plateau.

The battalion commander believed—not in set rules—but in a scheme of maneuver aimed at the enemy's vulnerable point.

CONCLUSION

In each case examined the attacking troops achieved a remarkable success. It would be incorrect to attribute the success entirely to the plan and scheme of maneuver of the commander. On the other hand it would be wrong to think that the scheme of maneuver had no relation to the success attained.

Generalship consists of being stronger at the decisive point—of having three men there to attack one.

"I gits there fustest with the mostest men," is said to have been Forrest's explanation of his success.

Our main effort should have a character of suddenness and violence. To have one at all, we shall have to economize somewhere else. To have a real one, we probably will have to stake our shirt.

To attempt to spread out over the terrain so as to be uniformly strong, is to be weak everywhere.

Every attack should have its main effort, and so should every attacking unit.

CHAPTER XXIII: FIRE

Effective fire opens the road to victory. Barring surprise, movement alone is not enough. There must be fire and movement.

IF THE enemy is allowed full mastery of his fires, any advance toward him in daylight will be at the expense of heavy losses. Men alone cannot fight machines and men. Fire must be fought with fire—with more effective fire.

In modern war the attack must be strong in fire power. The greater the density of the fire support, the greater the chance for a successful advance. Mere weight of numbers in the infantry attack will not by itself be effective. If the attack lacks surprise and superior fire power, the increase in numbers of men will merely mean an increase in the number of casualties.

Therefore, a basic part of a leader's duty is to insure adequate fire support for his attacking troops. This is a problem for all leaders—from the highest to the lowest.

Dependence for gaining fire superiority is placed on what may be termed the base of fire. The base of fire of large units consists of supporting artillery. When we come to the infantry battalion, its base of fire will be composed of machine guns and attached howitzer weapons. A rifle platoon or squad, however, also may have a base of fire. A platoon, which uses one section to fire on the enemy while the other section executes a maneuver, has used its first section as a base of fire. In a squad the automatic rifle may be used as a base of fire to cover the advance of other members of the squad.

The composition of the fire support as well as the method of employing it will vary widely with conditions. Often it will be found advantageous for the riflemen to approach the enemy from one direction, while the fire support from the base of fire is delivered from another direction. In any event the base of fire should advance as the attack progresses.

As a rule, riflemen in the attack do not fire except at ranges un-

der 400 yards. They work their way forward under the protection of the fire of supporting weapons—artillery, machine guns, and light mortars.

Riflemen cannot be expected to reply effectively to hostile machine-gun fire at long and medium ranges, particularly if it comes from a flank. The exact location of the guns is difficult to determine and to pop away at the countryside in the hope of neutralizing their fire is futile.

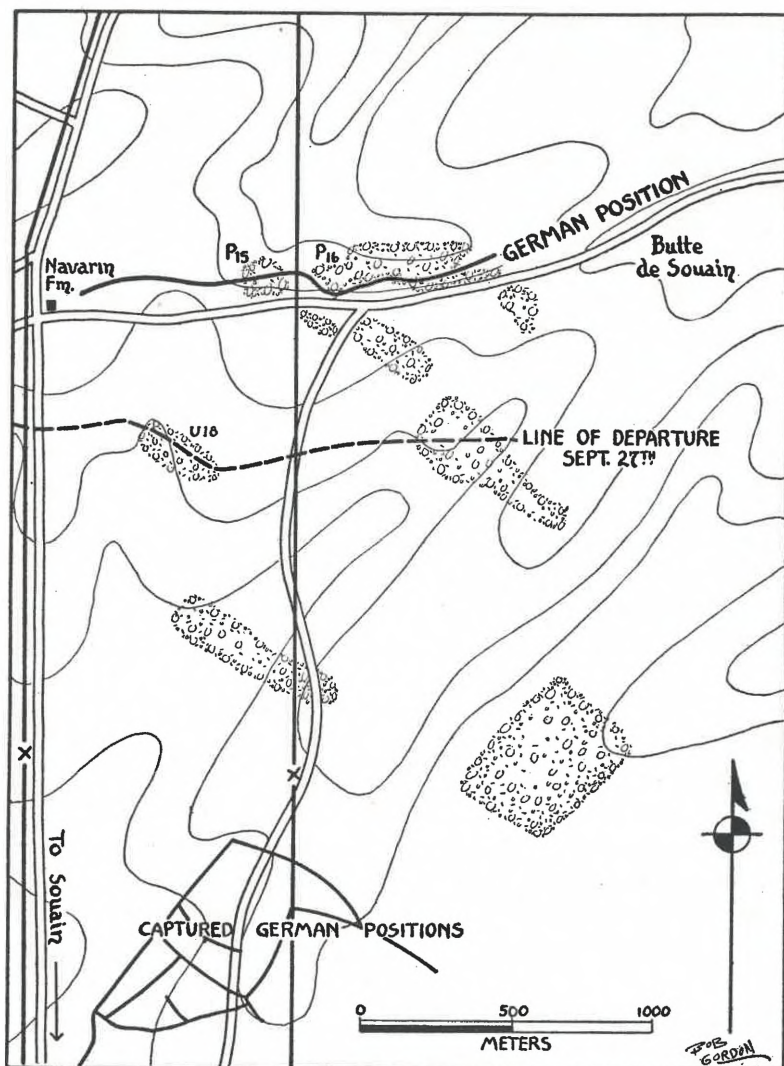
The experiences of the World War indicate that riflemen meeting with machine-gun fire at the longer ranges will either seek the nearest shelter and wait for the fire to cease or push forward without replying—depending upon the effectiveness of the hostile fire. When, however, the advancing riflemen get close enough to determine the approximate location of the guns, their own fire becomes an important factor in furthering their advance. It becomes of vital importance when the supporting fire of artillery, howitzer weapons, and machine guns is compelled to lift. At this stage attacking troops must cover by their own fire the final phase of their advance into the hostile position—or pay the price. Enemy machine guns that are still in action—and there may be many of them—should be overcome by pushing forward a few men to get on their flank or in their rear under cover of the fire of the other members of the attacking groups. To rush them, even with fire support of other riflemen is costly; to attempt to do so without it invites disaster.

The great strength which modern automatic weapons give to the defensive can be offset only by surprise, tanks, or fire.

The following examples from the experience of French and American troops in the World War illustrate the observance and non-observance by leaders of the duty of insuring that their advance is protected by fire.

EXAMPLE I

The French, on September 25, 1915, launched an offensive northward, which they hoped would bring a decision in the war. The 254th Brigade in reserve moved forward behind an assaulting division which captured the first German position. The attack was checked when it reached the vicinity of the wood U 18 by



Example 1

resistance from the second German position which extended from Navarin Ferme eastward to P 15, P 16 and Butte de Souain.

The 254th Brigade on September 27 was ordered to attack the front between Navarin Ferme and P 15 inclusive, some 800 yards.

The left boundary of the brigade was the Souain-Navarin Ferme Road.

The 19th Battalion of Chasseurs formed the leading wave, the entire battalion being in one dense skirmish line. Behind it were the 355th Regiment (two battalions only), the 171st Infantry and the 26th Battalion of Chasseurs. The attack orders called for a deep column of assault, waves being some 300 yards apart. At the hour of attack all waves (deployed lines of skirmishers in this case) were to move forward "and not allow themselves to be stopped either by obstacles or the enemy fire. We must break through at any cost."

Thus a mass of 6,000 bayonets was to assault a front of 800 yards. Enthusiasm was high. A decisive victory was believed to be near.

All battalions moved to the assault, *rifles on shoulders, bayonets fixed, and in step in quick time.*

The attack was launched. Seven or eight dense lines of skirmishers moved forward with rifles on shoulders. The French artillery which until then had been firing on the German position had to lift. The German artillery opened. The German rifles and machine guns opened. The leading wave went down; others behind it moved forward. The attack melted away. A few men reached the wire in front of the German position where they sought safety in shell holes. The attack was stopped and the entire brigade was pinned to the ground. Nothing could be done except wait for night.

During the night units were reorganized. Higher command ordered a resumption of the attack. The new brigade commander (the previous one had been wounded) issued his orders. Zone of action and formation were the same as for the 27th. The attack order included the following:

"The brigade commander insists particularly that it is with rifles on shoulders, bayonets fixed, and in good order that the result will be achieved. Do not think of firing, but push on."

The attack was launched at 3:30 p.m. The massive column of assault, from within 200 yards of the German position, rose, moved forward in step, and the events of the day before were repeated. Pinned to the ground, the debris of the brigade waited for night.

It managed to withdraw under cover of darkness. Losses were more than 50 per cent and included nearly all the officers.

From the article "The Power of Infantry Fire" by Lieutenant Colonel Ducornez, French Army, appearing in the February, 1927, number of the *Revue D'Infanterie*.

DISCUSSION

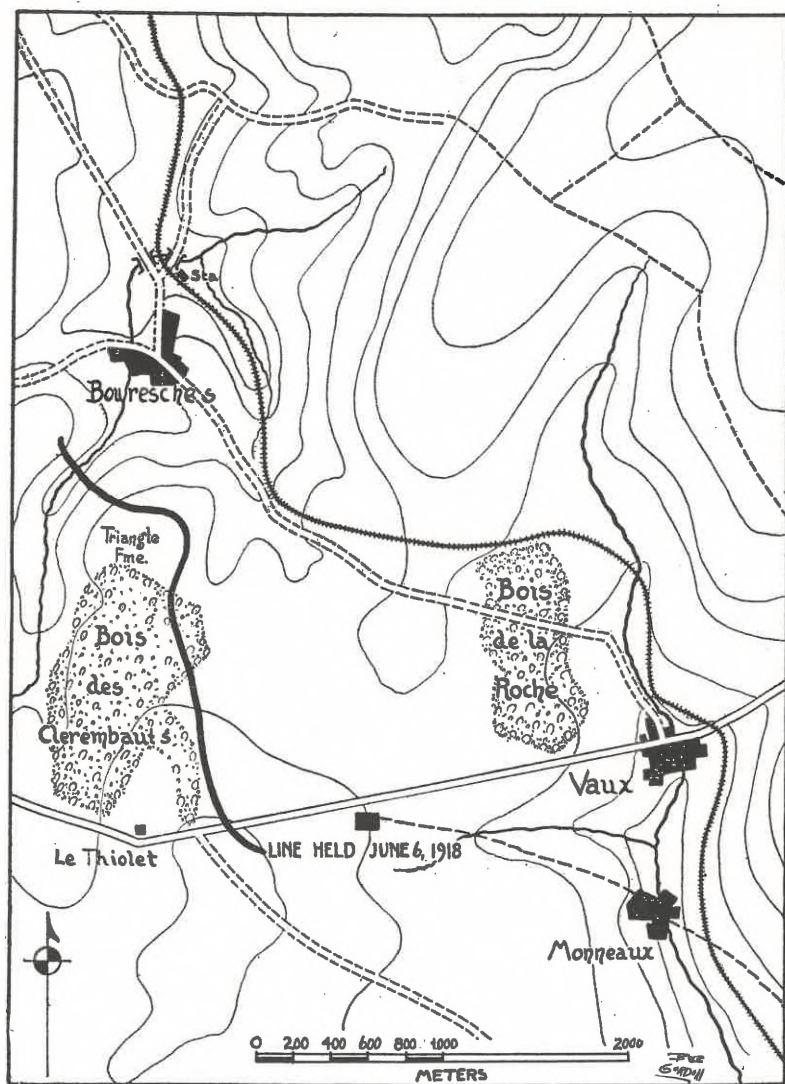
The war had lasted more than a year when this attack was launched, yet we see the French contemptuous of the effects of fire. No effort was made to utilize infantry fire power—in fact firing was forbidden. The French sought to overwhelm the enemy by the formation of a massive column of assault-tactics of a bygone day which took no account of the annihilating power of modern weapons. The result is clear-cut. The French, in attempting to win success by movement alone, met with a costly reverse. Six thousand bayonets, massed on a narrow front, proved helpless against a far smaller number of defenders.

EXAMPLE II

The line held by the 23d Infantry on June 6, 1918, extended generally north and south including Triangle Farm and thence south along the eastern edge of the Bois de Clerembauts. At 3:15 in the afternoon of June 6th an attack to the east and northeast was ordered for 5:00 p.m. with two battalions in assault, the 3d Battalion on the right. No artillery support was ordered but the two battalions were to be supported by the fire on one machine-gun company and by 37-mm. guns and Stokes mortars.

The time was inadequate for the necessary preliminary arrangements and the issue of orders within the battalions. The 3d Battalion attacked at 5:50 p.m. with companies M and K in assault—the company commanders literally gathering these companies together on the run and starting toward the enemy line.

The attack was over a rolling wheat field against an enemy line in the woods farther to the east. Little, if any, supporting fire was placed on the German position as the riflemen advanced. When the battalion was deep in the wheat field, the enemy machine gunners opened fire from the front and flanks, causing terrific casualties. Unable to advance farther, the battalion later withdrew to its original position, having lost 8 officers and 165 men, virtually all from the assault companies, M and K.



Example II

On July 1, 1918, the 3d Battalion 23d Infantry again attacked in a sector approximately 1,000 yards east of its line of departure on June 6th. In this attack masses of artillery, mortars and every

type of fire support, including a rolling barrage, were utilized. The 3d Battalion was to attack northeastward and to the left of the town of Vaux. Attached to the battalion were one entire machine-gun company, one section of Stokes mortars and one section of 37-mm. guns. Every detail for supporting fire had been completed. The attack moved off promptly at 6:00 p.m. and advanced in perfect order until 8:00 p.m. when all units were on their objectives and consolidating their positions. More than a hundred prisoners and thirteen machine guns were captured. After repulsing a strong counter attack, supported by artillery, a check of casualties revealed the loss of four officers and 143 men.

From the personal experience monograph of Captain Withers A. Burress, Infantry, who at the time these events took place was Regimental Operations Officer, 23d U. S. Infantry.

DISCUSSION

This example illustrates an attack with no fire support and an attack with the fire support of all possible supporting weapons. We see the same unit attacking twice over practically the same terrain. Almost a month had intervened, however, between the attacks which provided sufficient time for reorganization and receiving of replacements.

The first attack was entirely lacking in effective fire support and failed to attain its objective. Its only result was the elimination, for the time being, of two companies of the 3d Battalion from further combat usefulness.

The second attack clearly illustrates the efficiency of adequate fire support by the employment of all supporting fire weapons—all leaders having paid particular attention to providing this essential aid to the forward movement of the infantry elements. The 3d Battalion, now with less experienced personnel, attacked on schedule, overcame strong enemy opposition and advanced to its objective in good order and with fewer casualties than the earlier unsuccessful attack had suffered.

Vaux was a limited objective operation, prepared well in advance. In mobile warfare neither the time nor the material will be available for any such elaborate scheme of fire support, but on the other hand the organization of the defense usually will be less

complete. Moreover, leaders will be able generally to arrange for some form of effective fire support.

EXAMPLE III

At about 9:00 a.m., July 30, 1918, Company D, 47th Infantry, 4th Division, was attacking northward near Sergy in the Aisne-Marne offensive. Company D was the left assault company of the battalion. It had the 1st and 3d Platoons in assault, the 1st Platoon on the right. No supporting fire had been provided. After an advance of 250 yards the company came under fire. By short dashes and by crawling the men advanced the line some fifty yards further where it was held up for three hours, a little more than 100 yards from the enemy position.

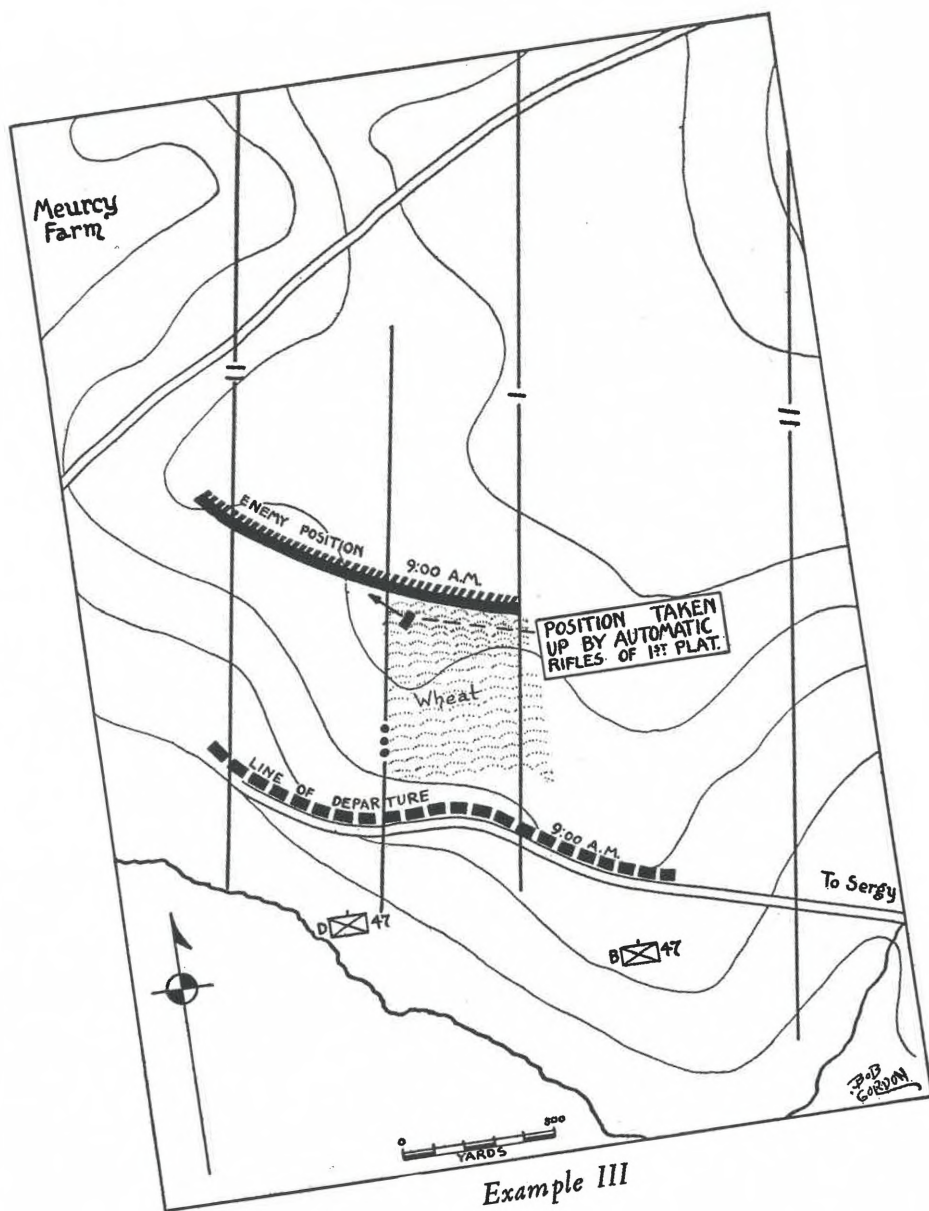
The 3d Platoon on the left was in the open and was suffering severe casualties from machine-gun fire coming from the front and both flanks. Various efforts were made to advance this platoon but without success.

The 1st Platoon on the right was in a partially cut wheat field. The left of the platoon was at the western edge of the field, the edge of the field running generally in the direction of the advance.

At this stage of the action a message was received from Company B, the assault company on the right, stating that machine guns in front of Company D were holding up Company B's advance and requesting Company D to "clean them up." Spurred to renewed action by this message, the company commander directed the 1st Platoon to send two automatic rifles forward to a point just within the left edge of the wheat field. They were to open fire to their left front whether they saw anything to fire at or not, this being the general location of the machine guns which had been holding up the advance of the 3d Platoon. The 3d Platoon was ordered to be ready to rush when the automatic rifles opened fire.

The automatic riflemen reached their position, saw some Germans and opened fire to the left front. At the sound of the Chau-chats the 3d Platoon rushed the hostile position, covering the intervening distance of 125 yards at a run. The resistance was promptly overcome, about twenty-five prisoners being taken in the assault.

From the personal experience monograph of Captain John W. Bulger, Infantry, who at the time these events took place was in command of Company D 47th U. S. Infantry.



DISCUSSION

In the above example, the advance of the entire battalion was definitely stopped. No fire support, artillery, howitzer weapons or machine guns had been provided. The battalion was separated from its regiment.

The company commander of the left assault company after three hours of failure, adopted a very simple maneuver. Two automatic riflemen of the right platoon were ordered to work their way forward through the uncut wheat and to open fire to the left front. Thus covering fire for the advance of the 3d Platoon on the left was provided. This proved effective, probably because of the surprise effect of fire coming from a new direction which required a new distribution of the enemy fire. At any rate, the combination of fire and movement was successful.

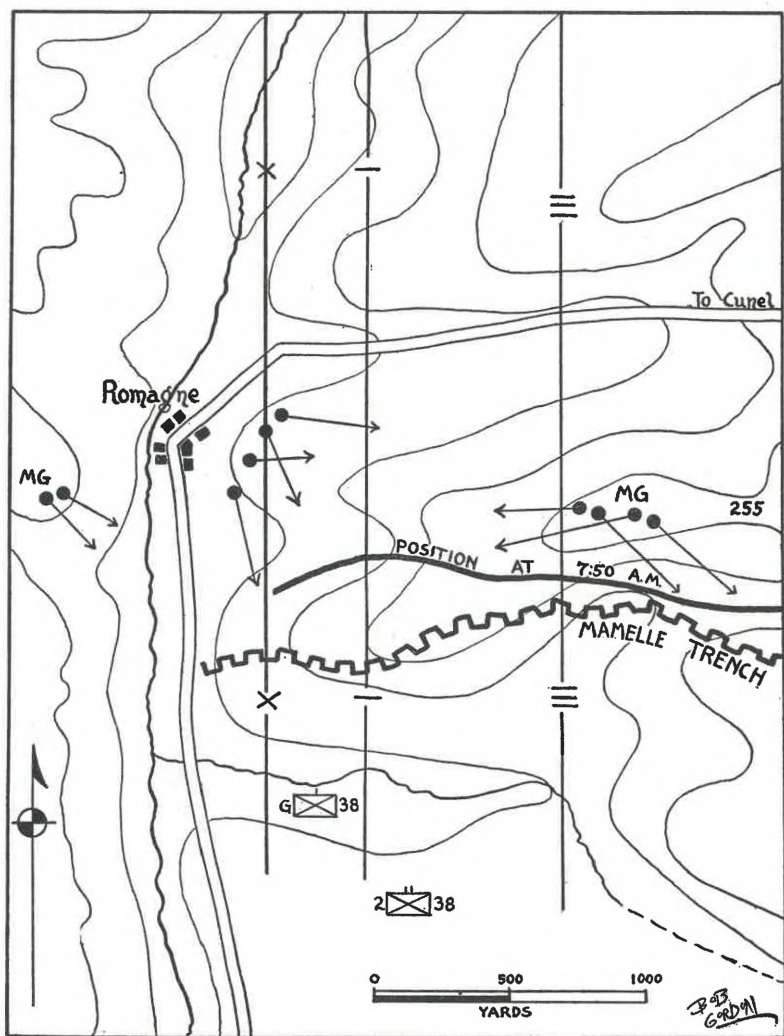
‡It is of interest to know that a similar maneuver at about the same time by Company B, on the right of Company D, resulted in the resumption of the advance by Company B after it had been held up for several hours. One automatic rifleman and a lieutenant from the left assault platoon crawled forward, gained a position considerably in advance of and on the flank of the rest of the company, and opened fire on the Germans to their right front. The automatic rifle fire enabled Company B to advance by crawling and individual rushes, and the German position was taken.

‡Statement of Captain Jared I. Wood, Infantry, who at the time these events occurred, commanded Company B 47th U. S. Infantry.

EXAMPLE IV

The 2d Battalion 38th Infantry, at 7:30 a.m., October 10, 1918, attacked northward from the Mamelle Trench—an abandoned German position. Each assault company attacked in column of platoons.

Company G on the left formed for the attack under the shelter of the western nose of Hill 255 with the assault platoon in Mamelle Trench and the other platoons farther down the hill. The scouts of the leading section were on the crest of the hill. At 7:30 a.m. the scouts moved forward unmolested, followed by the leading section in line of skirmishers. When this leading line reached the crest of the hill, it was met by heavy machine-gun fire and



Example IV

promptly disappeared from view. The sections in rear continued to move forward and pile up on those in front. Within fifteen minutes almost the entire company was pinned to the ground on the crest and northern slopes of the hill. A few men had succeeded

in working their way forward some 300 yards in front of this line. The enemy fire, artillery and machine gun, was so intense that the company was virtually paralyzed. In twenty minutes it suffered fifty per cent casualties.

The situation in the other companies was much the same. Platoons and companies were mixed and the few remaining leaders had no control. The battalion, unsupported by fire, was unable to make effective reply to the deluge of German fire which converged upon it from the town of Romagne and the ridge west of Romagne and, most disconcerting of all, from the crest of Hill 255. Unable to advance, at 7:50 a.m. the battalion commander ordered the companies to withdraw to Mamelle Trench. The withdrawal was accomplished by individuals crawling back over the hill.

When the battalion withdrew, five or six riflemen remained on the forward slope of the hill. A lieutenant, commanding a section of machine guns, ordered his guns to be set up near these riflemen. He opened fire on the German position on the crest of Hill 255 from which the heaviest hostile fire was coming, and continued firing until his ammunition was exhausted. Then the riflemen and the gun crews, led by the lieutenant, rushed this German position. The charge was successful. Thirty-six prisoners and six machine guns were captured. The battalion was unaware of what had happened until the prisoners were marched into the American lines.

From the personal experience monograph of Captain Francis M. Rich, Infantry, who at the time these events took place commanded Company G, 38th U. S. Infantry.

DISCUSSION

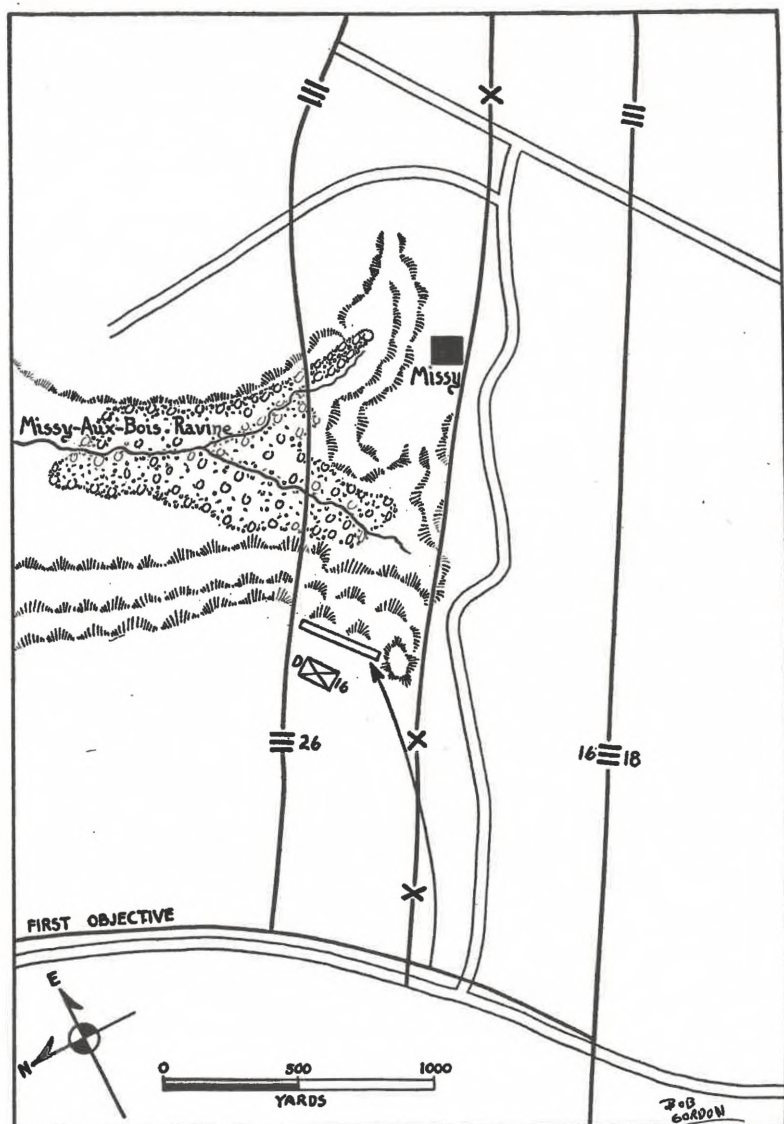
Here we see a battalion moving over the crest of a hill, met by fire from three positions. The men were confused, control was lost, and the advance was definitely stopped. The reasons are clear. The battalion was receiving no effective artillery support. It had established no base of fire. The German fire was not being neutralized. The battalion was not fighting fire with fire. Having attempted to fight fire with movement alone it became a mere target for the enemy fire. A few minutes of this was enough. It withdrew. The attack had failed.

Two machine guns and a few riflemen thereupon proceeded to accomplish more than the entire battalion had done. This small group began by placing heavy fire on the Hill 255 position. Here we see effective reply being made to the German fire; the Americans no longer had the exclusive role of targets. Then came the rush which carried the position. Movement combined with fire succeeded where movement alone had failed.

EXAMPLE V

On the morning of July 18, 1918, Company D, 16th Infantry, was attacking eastward as the left support company. Two companies in the battalion were in assault and two in support. On the first objective, Company D leapfrogged the assault company in its front and became the left assault company. The advance continued at 5:50 a.m. Visibility was poor because of the smoke and mist which still hung low over the terrain. Within a few hundred yards after this second advance began contact was lost with all units on the left, right and rear. The advance, however, was continued. Suddenly the fog lifted and Company D emerged on a small knoll on the western edge of the Missy-Aux-Bois ravine. Here further advance was stopped by concentrated enemy machine-gun fire from the front and both forward flanks. No friendly troops were in sight. The entire company was withdrawn in rear of the knoll. Patrols were sent out on each flank but the enemy fire was so severe that any advance beyond the crest of the knoll was impossible. Enemy machine guns had been placed to rake the ravine when any attempt was made to cross it. Shortly thereafter, and much to the surprise of the company commander, four French tanks appeared from the rear and moved into the position of Company D, bringing down additional enemy machine-gun and 77-mm. fire. Casualties were numerous. The captain of Company D immediately took charge of the tanks and pointed out to the French lieutenant in command of them the targets which had been located. The tanks moved straight across the ravine under a hail of enemy fire and then turned south down the ravine toward Missy, firing and causing havoc among the enemy machine-gun nests.

When the tanks left the ravine the company moved forward.



Example V

Only one enemy machine gun opened fire as the line crossed the crest of the knoll and advanced into the ravine.

From the personal experience monograph of Major Leonard R. Boyd, Infantry, who at the time these events took place was in command of Company D 16th U. S. Infantry.

DISCUSSION

The leader was here faced by an emergency situation—the unusual, which, in battle, is the rule. The company was pinned to the ground and no advance in any direction was possible. Contact had been lost not only with the supporting weapons but with all other troops. The timely arrival of the tanks provided the supporting weapons and the method of their employment gained fire superiority, thus making possible the advance of the unit. The tanks functioned as a moving base of fire. They rapidly and effectively gained the fire superiority which was essential if Company D was to be able to advance.

CONCLUSION

From the time infantry becomes exposed to the fire of hostile infantry, fire and movement become inseparable.

No troops can advance without heavy losses so long as enemy weapons fire freely on them.

At the longer ranges, supporting weapons will furnish the fire, and the riflemen will furnish the movement. Riflemen will require adequate fire support if they are to get close to the enemy without excessive losses and in sufficient numbers to assault effectively.

All the historical illustrations clearly portray the necessity for fire support. A perfect base of fire can seldom, if ever, be obtained. The attack on Vaux was one of the best examples of complete fire support provided for American troops in the World War. Numerous supporting weapons protected the advance of the rifleman, with sufficient density of fire placed so as to be always effective, thus minimizing losses.

The last three examples depict emergency situations in which a base of fire was organized to meet the unusual. Such situations should have been anticipated and provided for by the responsible leaders if maximum success was to be obtained.

Riflemen opposed by the direct fire of modern automatic weap-

ons cannot advance unless adequately supported by tanks or fire.

To assault by day an organized position, manned by good troops equipped with automatic weapons, without providing for adequate support by fire or tanks is folly.

When close to the hostile position the rifleman must cover his advance by his own fire.

CHAPTER XXIV: FIRE OF MACHINE GUNS

Machine guns affect the outcome of battle by fire power alone. Guns which have not fired have not attacked—no matter how many times they have been placed in position.

MACHINE GUNS act by fire alone; movement for this weapon has no other purpose than to secure positions from which more effective fire can be delivered. Maximum usefulness is obtained only when every gun within range of the enemy is firing effectively against him.

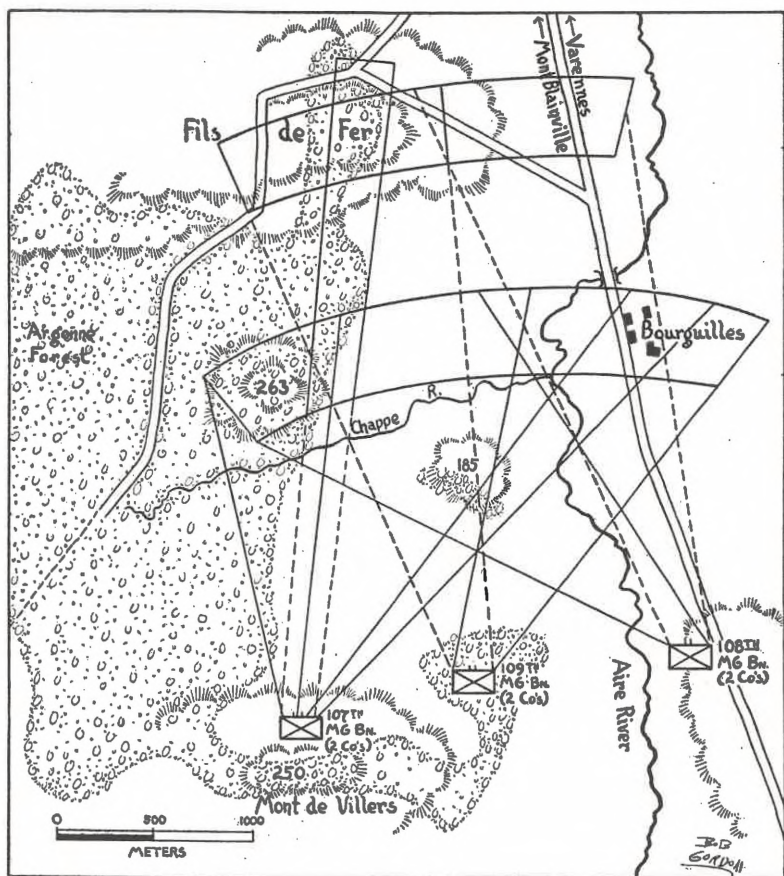
Studies of the use of machine guns on the Western Front disclose the fact that while some machine-gun companies performed many and varied fire missions to assist assault battalions, other units were little used, performed few fire missions, and had no effect upon the outcome. Thus it is apparent that some commanders secured great assistance from their machine guns, while others merely had them tag along.

Leaders must know what the guns can do before the attack starts, what they can do while movement is in progress, and what may be required of them during reorganization and consolidation. They must seek opportunities for employing machine guns in every phase of the action. Moreover, they must have the aggressiveness to keep everlastingly at the task of getting the guns forward, so that when the opportunity comes they will be able to seize it. Finally, leaders must be trained to recognize and take advantage of every favorable opportunity for bringing to bear the powerful influence of this important weapon.

Opportunities to fire will not be found lacking if machine-gun units know what the guns can do, how to do it and are desirous of providing real support. These are the units which are difficult to keep supplied with ammunition. They are also the units which affect the outcome of battles.

EXAMPLE I

The 28th Division (Pennsylvania National Guard) was seasoned



Example 1

and proved by September, 1918. It drew the assignment of out-flanking the eastern edge of the Argonne Forest in the opening phase of the Meuse-Argonne offensive.

The division had fourteen machine-gun companies. Eight were assigned missions in support of the assault battalions and the division machine-gun officer was directed to prepare a plan by which the remaining six companies might be used effectively.

Two companies of the 108th Machine Gun Battalion were assigned tasks in the left half of the Division zone of action, and

two companies of the 109th Machine Gun Battalion targets in the right half. These four companies were to fire initially upon the enemy front line from Bourguilles to Hill 263, inclusive, then to lift to the Fils de Fer. One of the companies of the 107th Machine Gun Battalion was directed to fire initially on Bourguilles and the other upon Hill 263, after which both were to place an enfilade barrage along the edge of the forest. (See sketch.)

It was all long range fire, and much of it was delivered by indirect laying. Reconnaissance for positions was necessary and data had to be prepared, checked and rechecked; T-bases were put in and the guns were placed in position. Each company was required to have 60,000 additional rounds of ammunition. Fire was to be delivered at the rate of 100 rounds per gun per minute. D-day and H-hour were announced as 5:30 a.m., September 26, 1918. The actual occupation of positions began late in the afternoon of September 25th. Despite difficulties and the great detail of preparation, checking, and coordinating, everything was in readiness well in advance of the hour set for the jump-off.

At 2:30 a.m. the artillery preparation started. Somewhat in advance of H-hour, the machine-gun barrage commenced on schedule and as planned. Fire from guns of all calibers poured into the German positions.

The advance began. During the day the left brigade carried Hill 263 and pushed on into the edge of the forest. The right brigade took Verennes, and then pushed up the Aire valley as far as Montblainville. Strong resistance was met but at the end of the day this so-called impregnable position had been successfully penetrated.

From the personal experience monograph of Major Stuart C. MacDonald, who, at the time these events took place, was Division Machine Gun Officer, 28th U. S. Division.

DISCUSSION

This example illustrates how guns, even those in reserve, may be used to good purpose during the initial stages of an attack.

Just how much was contributed to the success by the preparatory and supporting fires and how much by the drive and power of the assault rifle battalions we cannot say. We do know, however, that

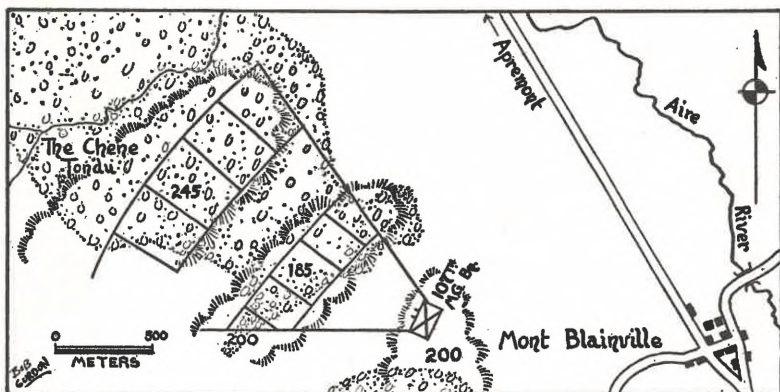
a signal success rewarded the complete utilization of supporting fires in proper assistance of rifle units.

Only at tremendous cost can men, unaided by supporting fires, successfully assault well defended positions. While preparatory and supporting fires can not eliminate the defenders, they can reduce the enemy defensive power by inflicting casualties, by making his fire less effective, by lowering his morale, and by interfering with his movement and reinforcement. The defense may thus be weakened to such an extent that the attackers can assault the position with a reasonable chance of success without prohibitive losses.

Commanders of regiments and larger units must seize opportunities to use all the supporting fires their organization can furnish. Guns of reserve battalions are available for these missions and should be so employed. If they remain silent, they exert no influence upon the outcome of battle.

EXAMPLE II

This example is a continuation of the operations of the 28th Division in the Meuse-Argonne. The next day, September 27, a rifle battalion, unsupported, had made an attempt to advance to the Chene Tendu but had been driven back after suffering heavy casualties from machine-gun fire. (See sketch.) It was reforming for a second attempt when the commander of the division machine-gun battalion arrived. Observing the situation, this officer



Example II

promptly arranged with the commander of the rifle battalion to support the attack by machine-gun fire. He brought up the 24 guns of the division machine-gun battalion (the 107th) and secured other guns from the 109th Machine-Gun Battalion, which was nearby. These guns were placed in position on the forward slopes of a ridge that overlooked the terrain and from which the attack could be supported by direct overhead fire.

All was now ready, but there were no targets. There were no enemy columns, no enemy groups, no visible enemy trenches or other works. On a wooded ridge, however, and in the Chene Tondeu were concealed the German defenders who had driven back the earlier assault of the battalion. The enemy was there, but what were the machine guns to do about it?

The battalion commander and the machine-gun officer met the situation by giving to each pair of guns an initial mission of firing upon the first wooded ridge. This fire was to start two minutes prior to the battalion leaving the line of departure, and was to continue until masked by the advance. Then all guns were given the second mission of lifting their fires and placing them upon a section of the Chene Tondeu. In both cases there were no definite targets, but the fire was to be area fire and was to sweep again and again through the suspected German positions. This plan was carefully coordinated in a minimum of time.

After the guns of the 107th opened the Germans attempted to silence them by fire, but the guns were well concealed, and the German fire, directed at the summit, passed harmlessly overhead.

The attack succeeded. The assault units met no resistance whatever.

From the personal experience monograph of Major Stuart C. MacDonald, who, at the time these events took place, was Division Machine Gun Officer, 28th U. S. Division.

DISCUSSION

This operation illustrates how machine guns may be used to aid assault units when they get into difficulties after having left the initial line of departure.

Whether this success was because the machine-gun fire found its targets and drove the Germans out, or because, upon the approach of a properly supported attack in force, the Germans withdrew to

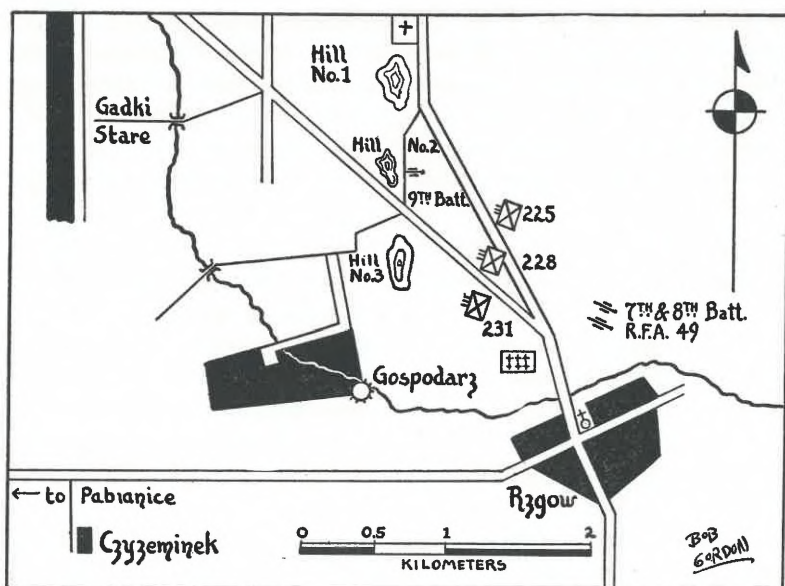
a new position in accordance with their own prearranged plan, is not definitely known. Whatever the cause of the German retirement may have been, however, the facts are that the first unsupported attack failed with accompanying heavy losses, while the second attack succeeded with no known casualties.

Two factors contributed to the success of the second attack. The most important factor was the willingness of the rifle battalion, despite its losses and despite its first unsuccessful attempt, to try again. The second factor was the presence of a machine-gun commander who saw something his guns could do and did not hesitate to offer them for the mission. Apparently no one had ordered this machine-gun commander up to find this particular assault battalion and to help it. He didn't wait to notify anyone or to get authority for this use of his guns. Instead he went to another battalion and borrowed more. He saw an opportunity to affect the outcome of battle by the use of his guns and seized it.

The ideal target seldom occurs in battle. Even small groups of exposed personnel will be seen but rarely. The absence of definitely located enemy groups, however, is not a bar to firing. If the enemy is thought to occupy an area, that area may be swept with fire to seek him out. Generally, the area in which the enemy is located will be determined by the resistance encountered in an effort to advance and this knowledge will afford the machine guns their opportunity. The machine gun is a suitable weapon to employ against areas. It has the necessary volume of fire and delivers it on a long and narrow beaten zone. It can be traversed uniformly to cover wide areas, and raised or lowered to cover deep ones. By searching critical areas valuable results may be obtained from machine guns which otherwise might be serving no purpose.

EXAMPLE III

Two kilometers north of Gospodarz and three kilometers northwest of Rzgow, in Poland, there are three little hills which lie in line from north to south. (See sketch.) On the 21st and 22d of November, 1914, during the campaign of Lodz, the 49th Reserve Division (German) was in contact with the Russians at these hills. The German infantry regiments, the 225th, 228th and 231st were on the east. These regiments were depleted, each having but a few hundred men.



Example III

Things had not gone well on November 21 with these small German regiments. The Russians had assaulted and captured the three little hills and with them the 9th Battery, which had been unable to get away.

Before daylight on the morning of November 22 the Germans launched an attack to recapture the battery and the three hills. The 225th was on the right, the 231st was on the left, the 228th was in the center.

We shall follow the 228th Infantry which advanced with its left following the left fork of the road extending northwest from Rzgów. Its mission was to recapture the battery and hill No. 2.

The attack of the 228th made good progress and soon recaptured the battery. The other regiments, however, had not come up and the Russians on Hill No. 1 and Hill No. 3 added their fire to that which the attackers were already receiving from Hill No. 2 to their front. To avoid these murderous cross fires the 228th Infantry pushed forward rapidly to the shelter of the slope of the hill. Here it was comparatively secure against the hostile machine-gun

fire but it found itself in an even more uncomfortable situation than that existing at the battery position it had just left. German artillery was shelling Hill No. 2 and much of its fire was falling short into the ranks of the 228th. The regiment was in a predicament. It could not stay where it was, it could not go forward, and, if it withdrew, it again came under machine-gun fire from three directions. The commander, choosing the least of three evils, withdrew to the battery position.

Now let us turn to the account of the German author. "Meanwhile it grew light. The Russians from their positions on Hill No. 2, again took up fire against the battery position. Their machine guns covered the place from right to left and from left to right. Motionless lay the 228th—Victims of Fate.

"There came with the machine-gun fire of the Russians a similar and still a different sound, another and different tempo. The 228th harkened to it. That must be German machine-gun fire. It rings from the right, it rings from the left, and now it rings from both sides. It may be the machine guns of the 225th from Hill No. 1 in the north. It may be the machine guns of the 231st from Hill No. 3 in the south. It must be the 225th and the 231st so portentous has it become. The hail of machine-gun bullets upon the 228th becomes thinner. The men begin once more to lift their heads. The dawning day gives them new life.

"Then suddenly arose Lieutenant Kuhlow, the only unwounded officer of the 228th. Holding a rifle aloft, with bayonet fixed, he called to his men: 'Vorwärts, Kameraden, folgt mir! Auf, Marsch, Marsch!' That daring call held magic. They sprang from the ground, there may have been a hundred in all, and like a thunderstorm they swept for a second time to the defended Hill No. 2. And now they are on the hill, their leader in their midst. The Russians fired to the last minute, then sprang from their trench and surrendered. Ring out the song of a brave man!"

From the experiences of the 49th Reserve Division (German) in the campaign of Lodz, November 22, 1914.

DISCUSSION

Here are two perfect examples of the use of machine-gun firing to assist adjacent units—one by the Russians in defense, one by the Germans in attack.

For some reason the German regiment in the center advanced ahead of the regiments on the flanks. As a result it alone struck the center of the Russian position. This gave the Russians the opportunity to place fire upon the attackers from three directions.

Finally, however, the two flank attacking regiments came forward and stormed Hills No. 1 and No. 3 leaving only the center of the three hills in the hands of the Russians. Badly battered, the 228th remained at the battery position apparently unaware of the successes on its flanks; it had sustained losses from the Russian machine guns and from the German artillery. For the moment its morale was low.

Then the Germans seizing the opportunity to aid the 228th poured in from flanks a heavy machine-gun fire upon Hill No. 2. "It rings from the right, it rings from the left, and now it rings from both sides." Aided by this fire the 228th again assaulted the hill—this time with success.

Opportunities to assist adjacent units by fire constantly occur in battle. In the attack some units advance faster than others, encountering less determined defenders. Some have easier terrain. Others are more aggressive. Units which succeed in pushing farther forward will have enemy positions on their flanks. Often these positions may be subjected to enfilade or reverse fires from machine-gun units which have gone forward with the riflemen. By taking advantage of such opportunities, adjacent units are helped forward and, at the same time, serious threats are removed from the flanks of the more advanced units.

On the defensive, similar opportunities to assist adjacent units by fire will be frequent. The first penetrations of a defensive line will be made on a limited front. By cross fires from adjacent positions as well as by prompt counter attack, such preparations may be stopped and the enemy ejected. But as Kipling remarks, "That is another story."

CONCLUSION

The foregoing examples illustrate the use of machine guns in the attack. While other examples might be given, good illustrations of this use of heavy machine guns by American troops in the early stages of the World War are none too frequent. In view of the innumerable examples that are available to show the decisive

influence of this powerful weapon in defensive operations, this comparative shortage of good attack illustrations is significant. It strongly indicates that the possibilities of machine guns as an adjunct to the attack were not fully appreciated until toward the end of the war. In the earlier American attacks machine guns were seldom assigned specific missions to support by fire. In many instances this was undoubtedly the result of insufficient time prior to the jump-off and the rapidity of the advance which followed it. Nevertheless, the idea seems to have prevailed that machine guns were fulfilling their mission as long as they maintained their place in the formation. In some instances they were handled much as if they were glorified automatic rifles—a role for which they are not suited.

The following quotation from Colonel Walter C. Short's book, *The Employment of Machine Guns*, bears on this point:

"In the 1st Division at Soissons on July 18, 1918, the machine-gun companies were broken up and three machine guns were assigned to each infantry company. These guns were practically all placed in the first wave of the company to which attached. Almost the only order given to the machine gunners was for them to take their places in certain waves. I talked with practically all infantry battalion commanders and machine-gun officers of the 1st Division after this fight, and I found no case where an order had been given for the machine guns to support the advance of the infantry with fire. The order had been invariably to take a certain place in the formation. The machine gunners had generally interpreted the order literally. They took this position in the formation and kept it. They were not interested in finding opportunities for shooting their guns nearly so much as they were in maintaining their position. The results were most serious. The machine-gun companies suffered very heavy casualties and accomplished practically nothing except during the consolidation. One company lost 57 men without firing a shot. Another company lost 61 men and fired only 96 rounds. This is typical of what happened to a greater or lesser extent throughout the whole division."

Later on the practice of the combat division improved greatly in this respect. Again quoting Colonel Short:

"At St. Mihiel the 90th Division made practically no use of its

machine guns. On the contrary, on November 1 it fired over 1,000,000 rounds with the machine guns, and practically all day the infantry advanced under the protection of machine-gun fire. The 2d Division at St. Mihiel used only 8 out of 14 companies at the beginning of the fight. On November 1 this division not only used all of its own guns but used ten companies of the 42d Division. The 5th Division at St. Mihiel used only 8 out of 14 companies at the beginning of the fight. In the early part of November this same division was using overhead machine-gun fire to cover the advance of its exploiting patrols. These three divisions are typical examples of the great strides that were made in the use of machine guns during the last few months before the armistice."

While it is true that the characteristics of machine guns make them less easily adaptable for the attack than for the defense, this fact will not condone the failure to exact from them the material support which they are capable of affording to advancing troops. The handicaps to their effective employment in the attack can and must be overcome. An intelligent appreciation by battalion and regimental commanders of their power and limitations is essential and this must be supplemented by the determination to get the guns forward and use them. The machine-gun units on their part must be on the alert to seize and exploit every opportunity to assist the forward movement of the rifle units, without waiting for specific orders to engage a particular target or locality.

Machine guns assist an attack to go forward only when firing. Their value in battle is in direct proportion to the amount of ammunition intelligently expended.

CHAPTER XXV: INFILTRATION

In an attack reserves are used to further success rather than to redeem failure.

THE ATTACK by infiltration, or "soft spot" tactics, endeavors to push its way rapidly through the weak parts of the enemy position, avoiding or temporarily masking the strong parts. The small groups that filter through unite beyond the resistance. The strong points are then gradually reduced by action from front, flanks and rear.

An initial breach made in the enemy position must be widened and deepened. This advance within the hostile lines is most difficult. The situation will be confused. Some units will have advanced much farther than others. Location of our troops will not be known definitely to the higher commanders, and close support by the artillery will therefore be relatively ineffective. Such conditions demand the utmost in aggressive leadership on the part of the commanders of small units.

It is risky to drive through the gap without endeavoring to widen it. Sufficient reserves to exploit the success cannot be pushed through a bottle neck. On the other hand, if the advance is halted while the breach is exploited laterally, time is lost, and the enemy is afforded an opportunity to reform on positions in rear and limit the success. As a rule some compromise must be adopted between lateral and forward exploitation.

Usually a rapid advance in its own zone is the most effective assistance a unit can render its neighbor. By so doing it drives past the flanks of enemy posts that are still resisting, thereby making it possible to attack such points in flank and rear.

However, if a rifle company is having great difficulty in advancing in its own zone, while an adjacent company is pushing forward rapidly, it will often be advantageous to move the bulk of the company, or at least its maneuvering elements, into the adjacent zone and fight beside the company which has advanced. Thus the company has the option of advancing or attacking in

flank the resistance which has been impeding its assault elements.

Similarly, an infantry unit may, and frequently should, fire into the zone of adjacent units. It is the responsibility of the commander that this fire does not endanger neighboring troops. Boundaries for infantry units are intended to be a help and a convenience, not a hindrance.

Captain Liddell Hart, the British writer, has termed infiltration tactics the "expanding torrent system of attack." He writes:

"If we watch a torrent bearing down on each successive bank or earthen dam in its path, we see that it first beats against the obstacle, feeling and testing it at all points.

"Eventually it finds a small crack at some point. Through this crack pour the first dribblets of water and rush straight on.

"The pent-up water on each side is drawn towards the breach. It swirls through and around the flanks of the breach, wearing away the earth on each side and so widening the gap.

"Simultaneously the water behind pours straight through the breach, between the side eddies which are wearing away the flanks.

"Directly it has passed through it expands to widen once more the onrush of the torrent. Thus as the water pours through in ever-increasing volume, the onrush of the torrent swells to its original proportions, leaving in turn each crumbling obstacle behind it."

Captain Liddell-Hart suggests that the breach must be widened in proportion as the penetration is deepened, by progressive steps from platoon to brigade. He propounds the following procedure:

1. The forward sub-unit, which finds or makes a breach in any of the enemy's positions, should go through and push ahead so long as it is backed up by the maneuver body of the unit.

2. The forward units on its flanks who are held up should send their maneuver bodies towards and through the gap. These will attack the enemy in flank, destroy his resistance and so widen the gap.

3. Meanwhile the units in rear press through the gap and deploy (expand) to take over the frontage and lead the advance in place of the temporarily held up units.

4. The held up units, as soon as they have accounted for the

enemy opposing them, follow on as maneuver units to support the new forward units.

EXAMPLE I

On October 10, 1918, the 2d Battalion 38th U. S. Infantry attacked to the north from the vicinity of the Mamelle trench.

Companies E, F and G were placed in the front line and Company H held in battalion reserve. Each front-line company was directed to attack in column of sections, making eight successive attack waves per company. Thus there was to be formed, as the battalion commander expressed it, "a rolling barrage of troops." It was expected that this rolling barrage of sections would easily overcome any resistance that might be met in front of the battalion. Rear sections were to follow their leading sections at a short distance.

Company G formed for attack under cover of the hill on which the Mamelle trench was located. The 1st and 2d Platoons were in the trench, the 3d and 4th about 100 yards in rear along the south slope of the hill. At 7:30 a.m. the scouts moved forward and crossed the top of the hill unmolested. The leading section followed in line of skirmishers. As this section cleared the hilltop it was greeted by heavy fire and promptly disappeared from view. The sections in rear continued to move forward. They piled up on those in front. Unexpected machine-gun and artillery fire was received from the front and from both flanks. Within fifteen minutes the entire company was pinned to the ground on the north slopes and on top of the hill. Platoons were inextricably intermingled, losses were heavy and the few remaining leaders were unable to control the troops.

The rest of the battalion suffered the same experience. It was surprised and nearly destroyed at the start of the attack.

From the personal experience monograph of Captain Francis M. Rich, Infantry, who at the time commanded Company G 38th Infantry.

DISCUSSION

In discussing this example in a previous chapter, it was pointed out that failure to maintain contact with the enemy resulted in this surprise. However, it was the formation used, and the conception of the "rolling barrage" of sections that resulted in the

to prescribe that eight sections, without consideration of either the terrain or the situation, should blindly follow each other in column at a definite distance. Permitting all troops to become engaged before the hostile situation was known was equally at fault. If, after the leading sections had been stopped near the crest of the hill, the advance had been halted, and a brief estimate made, the situation could have been handled. As it was, the local reserves were automatically committed frontally against the very resistance that had proved too much for the leading troops. The usual result followed.

EXAMPLE II

The British 1st Division took part on September 25, 1915, in the Battle of Loos. The 2d Brigade, attacking on the right, was thrown back and failed to reach the German position. On the left, the left elements of the 1st Brigade were successful, captured the German front line and pushed on.

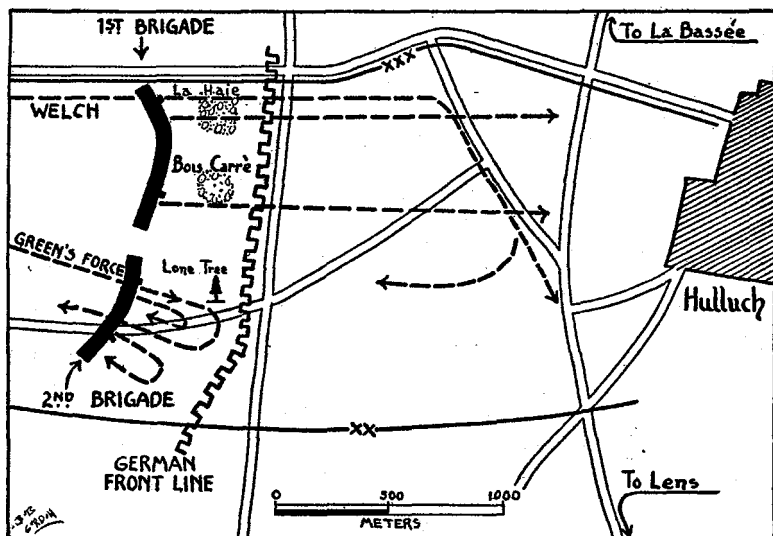
The 2d Brigade renewed the attack on its front using fresh troops. This attack also broke down with heavy losses. The 3d Brigade (British divisions contained 3 brigades each of 4 battalions) and a force of two battalions, known as Green's force, still remained at the disposal of the division commander. Green's force was ordered to make another frontal assault on the left of the 2d Brigade, while elements of the 3d Brigade advanced north of it through the break in the German defenses near La Haie Copse.

Green's force attacked with one battalion on each side of the Lone Tree. This too was soon brought to a standstill.

The leading battalion of the 3d Brigade lost direction, bore off to the right, joined Green's force and was involved in its repulse. Let us see what happened to the next unit, the 2d Welch Battalion.

With two companies in front and two in support, it moved in extended order over open ground for a mile. It was unobserved. The German front line and No Man's Land were found to be completely deserted. No trace of the battalion supposed to precede the Welch could be found, so after advancing a short distance within the German position, the battalion commander changed direction to the right front toward a point where the exposed right flank of the 1st Brigade was believed to rest. This movement led

the battalion in rear of the enemy trenches south of Bois Carre, opposite which Green's force and the 2d Brigade were held up. A number of Germans manned the reverse side of their trench and opened fire. The Welch kept moving forward.



Example II

Suddenly, fire from a portion of the trench ceased and a German officer bearing an extemporized white flag, followed by five other officers and 160 men, came forward and surrendered. The Welch moved on and halted on the Lens-La Bassée Road southwest of Hulluch, where they were on the right flank of the 1st Brigade. One company was sent against the remaining Germans still holding up Green's force and the 2d Brigade.

Threatened in rear by the detached company of the Welch, the remaining German elements consisting of more than four hundred men of the 157th Regiment surrendered. The 2d Brigade and Green's force were now free to advance. By 5:20 p.m. this advance had reached the Lens Road and had linked up with elements of the 15th Division on the right.

From the *British Official History*.

DISCUSSION

In discussing the Battle of Loos the *British Official History* states:

"An attack on an entrenched position is not merely a matter of the commander making a good plan and getting it thoroughly understood and rehearsed. Once released, an attack does not roll on to its appointed end like a pageant or play. Innumerable unforeseen and unrehearsed situations, apart from loss of the actors by casualties, begin at once to occur. Troops must be led, and there must be leaders in every rank, and in the latter part of 1915 these leaders were in the making.

"The leading of the 2d Welch after it had broken through and arrived in rear of the enemy's trenches near Lone Tree, which resulted in the surrender of Ritter's force, and enabled the 2d Brigade to advance, was an exhibition of initiative only too rare on the 25th of September."

The achievement of this one battalion compared to that of the four or five battalions (Reserve of 2d Brigade, Green's force, and a battalion of the 3d Brigade) who repeatedly dashed themselves against the wire of the German front line, is very striking.

Battalion after battalion attacked, only to prove a little more thoroughly that a frontal assault, by men only, against wire and machine guns produces nothing but casualties—and a few medals for bravery among the survivors.

All of these battalions were engaged where the original attack had failed, and in the same way. The barbed wire that stopped the first attack stopped the later ones just as efficaciously.

Finally the 2d Welch Battalion was used, not where there had been failure, but where there had been success. It went through the narrow gap that had been created in the German front line, then bore to the right, spread out and gained contact on the flank with the troops that had made the gap. A broad front of attack was again created and the breach formed by the failure of the 2d Brigade was covered.

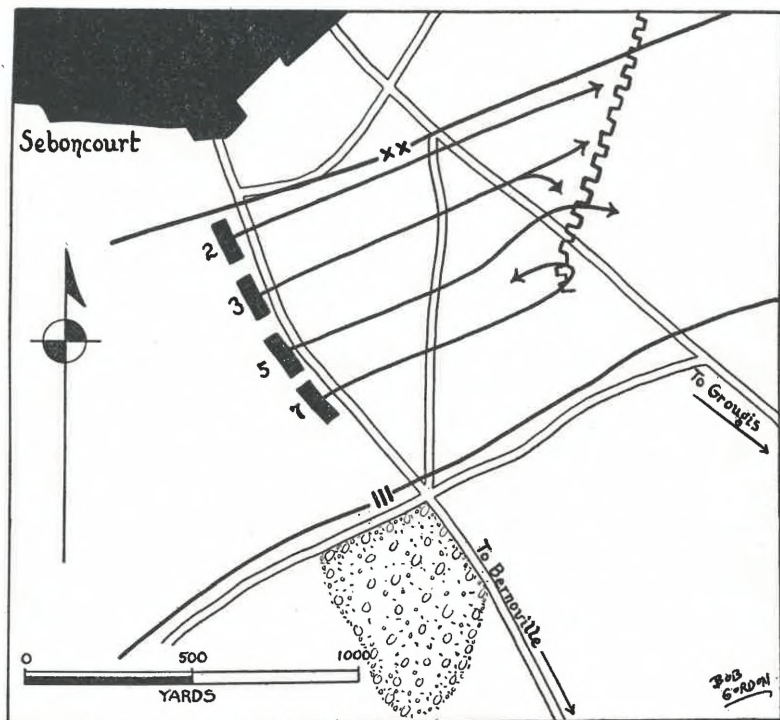
The Welch went through a narrow gap; they then spread out and pushed forward, using a portion of their force to widen the gap. The moral effect of this last force, a company, proved de-

cisive; the Germans threatened from the rear, surrendered, and the way was opened for the 2d Brigade.

This one battalion accomplished what the 2d Brigade, assisted by three other battalions, had failed to do. The Welch pushed where the pushing was good. On a rather large scale, the operations of this battalion afford, three years before the word and the idea became so prevalent, a splendid example of what is meant by the attack by infiltration.

EXAMPLE III

On October 12, 1918, the 12th French Infantry took part in an attack to the northeast. Its zone of action was indicated on the sketch. To its front was a strongly-held German trench protected by wire. The trench extended diagonally across the front, follow-



Example III

ing a crest. There were one or two slighter crests between the trench and the Seboncourt-Bernoville Road, but otherwise there was slight cover for the 12th Infantry.

The 2d Battalion was on the right and the 1st on the left. Each of these battalions placed two companies in assault. Two machine guns were attached to each assault company and four were moved forward to positions near each reserve company. Each assault company advanced with two platoons in assault and two in support. The order of assault companies from southeast to northwest was: 7th, 5th, 3d and 2d.

The 7th Company, which was closest to the Germans, became heavily engaged before the other units and was temporarily eliminated as a combat unit. Although it reached the German position, it was thrown out by a counter attack and suffered heavy losses.

The remaining three companies, on reaching the last of the smaller crests west of the German trench, were pinned to the ground by heavy fire.

A large threshing machine was located in front of the German position near the point where the Seboncourt-Grougis Road crossed the trench. A few men converged on this thresher to take advantage of the slight cover it offered from hostile fire. A lieutenant and a sergeant noted that the entanglement across the road consisted of portable wire. They rushed forward and cleared away the wire at this point but in so doing were wounded. However, elements of the 5th Company that were following broke through, entered the German trench and cleared a short stretch to each side.

These men then continued the advance, leaving five or six men with a French machine gun and a captured German machine gun to fire to the north, in order to assist the 1st Battalion and keep the gap open.

Meanwhile the company commander of the 3d Company had noted this success. His assault platoons were pinned to the ground. He brought up his two machine guns and opened fire with them. He sent a runner with a message to the commander of his right support platoon directing him to move under cover of the crest toward the thresher, enter the German position and attack northward along the German trench. The runner was killed before he reached his destination.

However, the platoon leader in question, on his own initiative, decided to make the very movement ordered. His platoon passed through the breach, turned north and took in flank and rear the defenders of the trench, capturing two machine guns and 50 prisoners. The assault platoons of the 3d Company then advanced, and captured all of the trench in their zone. This action allowed the 2d Company to capture the position in its front soon afterward.

From the article by Major Janet, French Army, in the *Revue D'Infanterie*, November, 1926, on the advance of the 123d French Division from the Hindenburg position.

DISCUSSION

The mechanism of infiltration tactics finds a clear illustration here. A few men get a foothold in the enemy position. Most of them push forward. However, the gap is small, so some men are left to keep it open, to widen it and to assist adjacent units by fire. In this case about six men were left behind with two machine guns to neutralize the flanks of nearby enemy posts.

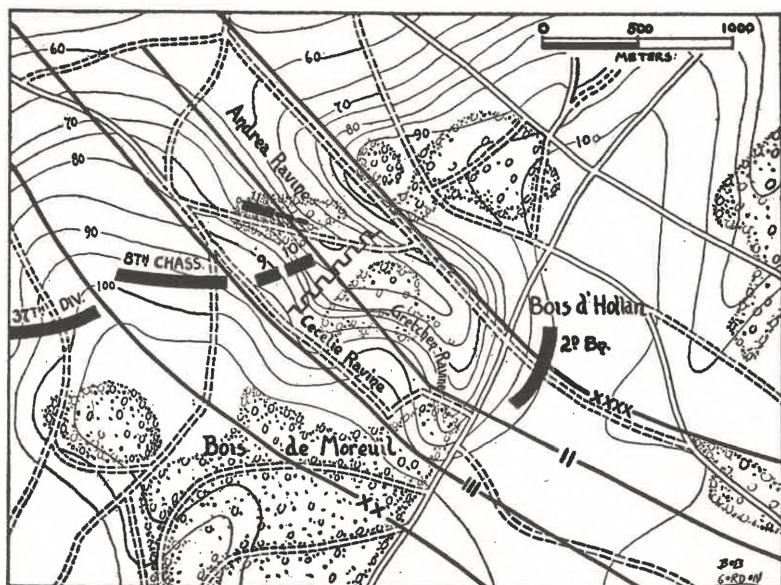
The assault platoons of the 3d Company were pinned down; they couldn't move. The company commander decided to use a support platoon—where? Not in his own zone where the attack was failing; had he done so he would probably have done nothing more than swell the casualty list. Instead he ordered the platoon to move into the neighbors' zone, to the gap, to the weak point, while he used a small base of fire to occupy the enemy and pin him down during the movement.

It is interesting to learn that the subordinate did the very thing the captain desired, although the order did not arrive. He moved out of his zone, penetrated the hostile position and exploited the success laterally. As a result of this one small gap being widened, the entire hostile position was soon captured on a two-battalion front.

In this case the exploitation was almost entirely lateral, which was probably due to the virtual elimination of the 7th Company and the extremely heavy casualties in the 5th.

EXAMPLE IV

On August 8, 1918, "the black day of the German Army," the 42d French Division attacked in conjunction with other French



Example IV

units and with the British. The 42d Division attacked southeast. On its left were Canadians. On its right was the 37th French Division. The 42d used three assault battalions initially. From left to right these were the 2d Battalion 94th Infantry, the 3d Battalion 94th Infantry and the 8th Battalion of Chasseurs.

The attack was launched at 4:20 a.m. The 2d Battalion of the 94th made a rapid advance along the left boundary of the division, although, in the early stages of the attack, it saw no sign of the Canadians.

On the right the 8th Chasseurs as well as the 37th Division did not fare so well and were held up in front of the Bois de Moreuil. The center assault battalion of the 42d Division, (the 3d Battalion 94th Infantry) had attacked with the 9th Company on the right and 10th on the left. Each company had machine guns attached. The 11th Company followed the 10th.

As the 9th Company neared the Bois de Moreuil it came under fire and fell into disorder. Most of the men took cover, facing the wood. The 10th Company advanced somewhat farther but

was eventually held up by fire from the front and right front. The Germans were located in the woods and in a trench that ran along the crest in front of the Cecilie Ravine.

The battalion commander caused mortar and machine-gun fire to be placed on the points from which the resistance seemed to come, but still the 9th and 10th Companies were unable to advance. Meanwhile, a large gap had opened between this battalion and the 2d Battalion on the left, which had swept victoriously on. The 3d Battalion had lost the rolling barrage.

At this time, on his own initiative, the commander of the 11th Company, in battalion reserve, took action. Taking advantage of the rapid advance of the 2d Battalion he moved forward to the left of the 10th Company. He found cover on the slopes of the Andrea Ravine and reached the trench in front of the Cecilie Ravine. There were no Germans in that part of the trench. He then sent one platoon to the right to attack generally along the trench. With the rest of the company he continued the forward movement through the Cecilie Wood toward the Gretchen Ravine.

The platoon which attacked laterally along the trench was successful; it and the 10th Company, which was enabled to advance, captured ten machine guns and fifty prisoners.

Meanwhile, the bulk of the 11th Company had reached the Gretchen Ravine, having moved by small groups and individuals, and there reformed. A Stokes mortar was firing on the northeast corner of the Bois de Moreuil, and reducing enemy machine guns which had been firing from there. Likewise machine guns of the 2d Battalion were enfilading the southeast edge of the wood in order to assist the 3d Battalion. The 11th Company took advantage of these fires, attacked and captured the northeast corner of the wood. Meanwhile the 10th Company moved through the wood, swerved to the right and came up on the right of the 11th Company. The 9th Company reorganized and later arrived in rear of the 10th and 11th Companies.

German resistance in the Bois de Moreuil broke down after the 11th Company had captured the northeast corner of the wood and the 8th Chasseurs were enabled to advance and mop up.

The advance from the road running along the southeast edge of the Bois de Moreuil, which was an intermediate objective where

the barrage had halted for a short time, was resumed by all assault elements of the 42d Division in good order and on time.

The 42d Division on this day captured 2,500 German prisoners. Its own losses were small.

From *Infantry in Battle*, by Major Bouchacourt, French Army.

DISCUSSION

The operations of the 11th Company furnish an excellent example of the "expanding torrent." The 2d Battalion had driven a hole in the enemy position, a deep but narrow breach. The 3d Battalion was held up, but its reserve, the 11th Company, having more freedom of movement than the leading companies, which were immobilized by fire, executed a maneuver.

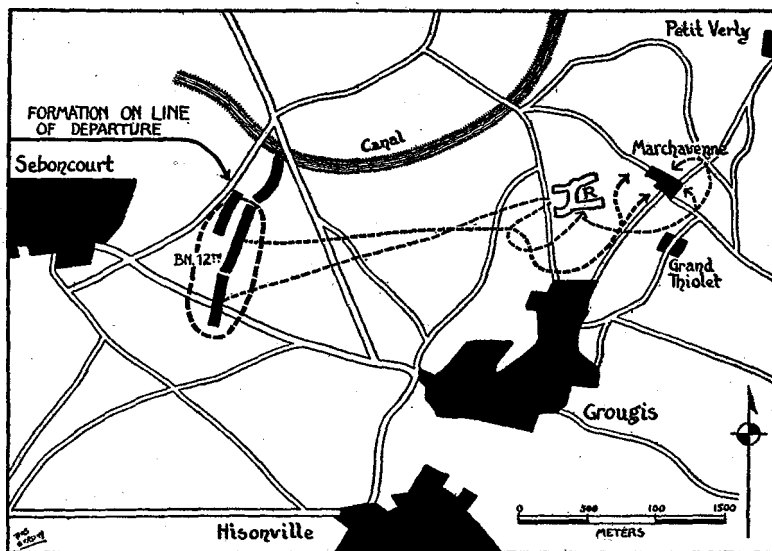
Preferably this should have been done by the order of the battalion commander. In this case it was done on the initiative of the commander of the reserve company. By good luck there was coördination of effort. The battalion commander had caused certain localities to be covered by the fire of his machine guns and his Stokes mortar, and this fire facilitated the movement of the 11th Company.

It advanced on the left where there was cover, and where the attack of the 2d Battalion had swept the path clear. It reached a position abreast of the Germans who were holding up the 10th Company. No other troops being immediately available, the 11th Company employed one platoon to widen the breach while the remainder of the company pushed on to catch up with the 2d Battalion, thereby extending the front of attack. The 10th Company, thanks to this assistance, was now able to advance; it pushed on and became the right assault company instead of the left. The battalion was enabled to resume the advance along its entire front on time. Furthermore, its action materially helped the 8th Chasseurs to move forward. The 9th Company was in such confusion that it could no longer be continued in assault. Accordingly, it was reorganized and moved forward as the battalion reserve.

This action graphically demonstrates the concept of infiltration as propounded by Captain Liddell Hart.

EXAMPLE V

On October 17, 1918, the French 12th Infantry, in conjunction



Example V

with other French units, attacked northeastward toward Marchavenne. The attack, supported by considerable artillery, jumped off at dawn.

The 12th Infantry formed a provisional battalion of its 2d and 3d Battalions and used this force as an assault unit. Its strength in effectives was approximately seven officers and 250 men. The battalion was tired and depleted. The troops had been attacking for days. The battalion commander had but little confidence in the success of the attack. On the other hand, the three company commanders were experienced, had the confidence of their men and were close personal friends.

The battalion formed for attack with the company of Lieutenant Biard on the north and that of Captain Equios on the south. The company of Lieutenant Brouste was held in battalion reserve.

A heavy fog covered the ground as the attack began. The French over-ran the German main line of resistance, some 500 yards in front of the line of departure, and pushed on. Lieutenant Biard's company advancing rapidly, veered to the right and, without realizing it, crossed in front of the company of Captain Equios.

The fog began to lift and the Biard company received heavy fire from a German redoubt (R) which was protected by wire. Lieutenant Biard turned his company sharply to the south—having decided to envelop the redoubt from that direction. Germans who were holding Grougis did not notice this movement. Lieutenant Biard reached the north edge of the village without meeting any resistance. To the northeast toward Marchavenne, which was not far distant, he heard artillery firing. The company of Lieutenant Brouste had followed his movement. No word had been received from the battalion commander, whose whereabouts Lieutenant Biard did not know. He had no information of the location of any troops on the battlefield except the two companies with him.

Lieutenant Biard now changed his plan. He decided not to attack the redoubt at all, but to attack Marchavenne. In the clearing fog the Biard company, one man at a time, filtered through some orchards on the north edge of Grougis until the Grougis-Petit Verly Road was reached. The company then moved toward Marchavenne, following the ditches along the road. The Brouste company followed.

Scouts were sent out and Lieutenant Biard made a personal reconnaissance. The fog was almost gone. Grand Thiolet, a few farm buildings, could be seen 300 yards to the right. The movement was still unobserved by the Germans. Two batteries of artillery were firing vigorously from orchards just west of Marchavenne. Nearby were machine guns in which belts were inserted. Their crews lay near the guns.

As the French companies closed up, Lieutenant Biard issued brief orders and units deployed cautiously. One platoon was to rush the batteries west of the town, one was to move through Grand Thiolet, then attack Marchavenne from the east, another was to circle to the east and attack the town from the north, and a portion of the force was to move along the road and attack from the southwest.

The attack proved a complete surprise. The town was captured as were four officers (including a battalion commander), 150 men, eight 77-mm. guns and 25 machine guns. The French did not lose a man.

Shortly afterward the company of Captain Equios arrived. This

company had likewise encountered the redoubt at R and the entire company had been immobilized by fire. Fortunately, French artillery fire, falling on the redoubt, allowed Captain Equios to pull back rear elements of his company and reorganize. At this time he learned that the rest of the battalion, which he had been looking for on his left, had pushed far ahead on his right. Captain Equios therefore utilized his reorganized elements in an enveloping maneuver from the south and southeast. The redoubt was captured, the German defenders fleeing to the northeast. Captain Equios then continued the advance.

Upon his arrival the battalion organized Marchavenne for defense. Counter attacks were repulsed. Later other French units arrived. The provisional battalion's bag of prisoners during the day exceeded its effective strength. Its losses were less than 60 men.

From the account in the *Revue D'Infanterie*, December, 1926, by Major Janet, French Army.

DISCUSSION

Most of the success of the 12th Infantry must be attributed to the surprise gained through the use of infiltration tactics.

The Biard company found a gap in the hostile defense—a soft spot. It saw that reserves were following, so it pushed through the gap. The reserve company followed. Movement through the gap was on a narrow front, one man at a time. The movement continued unobserved until near Marchavenne. Here the companies spread out again to attack. Surprise was achieved by the care taken to avoid hostile observation and by the direction of the attack on Marchavenne.

There are things to criticize in the operation. The battalion commander exercised no control; he had no idea what was going on. Lieutenant Biard, after finding his gap, either did not try to notify or did not succeed in notifying his commander what he was about to do. Moreover, both assault companies early in the attack lost direction and lost contact with units on the flanks.

Nevertheless, when all things are taken into consideration, the attack of this battalion must be considered as one more example of a master effort furnished by troops who have almost reached the limit of moral and physical endurance.

CONCLUSION

The combat within the enemy position is infantry's great hour. It is the moment when infantry is largely on its own; when it must use its own fires to the utmost advantage while it maneuvers. It must neutralize and turn enemy resistances, infiltrate and inundate the enemy position. It is the hour of small assaults from the front, the flanks, the rear.

Fire action in the direction of progression will be difficult except for the elements of leading echelons and for curved trajectory weapons. Machine guns with their flat trajectory, will have excellent opportunities for lateral neutralization.

Successful maneuvers under such difficult conditions demand an elasticity of mind, a lively intelligence and quick, sure decisions on the part of small unit commanders. They further demand infantry that has been trained to maneuver. In war troops will do only that which they have learned in peace; at least this is true in the early days of a war.

No rule can be laid down that will state whether success should be exploited laterally or forward. It would seem desirable for small infantry units to devote most of their strength to pushing forward and broadening the front of attack to its original dimensions. Direct action by a few men from flanks and rear against enemy resistance will often be decisive due to the moral effect. This was the case in two of the examples noted, the 2d Battalion Welch and the 11th Company of the French 94th Infantry; however, each case must be solved on its merits.

By using reserves where success has been obtained, we oppose our strength to enemy weakness, and we exploit our success. If we employ our reserves to remedy the failure of assault units and commit them in the same manner and in the same place as those assault units we will frequently strike the very parts of the enemy position that have already been proved the strongest, and therefore we will be playing directly into the enemy's hands.

To succeed, we must move fast. To go fast we must go where the going is good.

The following are the comments of the *Australian Official History* on certain attacks made at the Dardenelles by Australian troops on August 7, 1915, in which reserves, after the leading troops had

failed, went forward over the same ground and, in their turn, failed in trying the identical movement.

"For the annihilation of line after line at The Nek the local command was chiefly responsible. Although at such crises in a great battle, firm action must be taken, sometimes regardless of cost, there could be no valid reason for flinging away the later lines after the first had utterly failed.

"It is doubtful if there exists in the records of the A. I. F. one instance in which, after one attacking party had been signally defeated, a second, sent after it, succeeded without some radical change having been effected in the plan or the conditions."

CHAPTER XXVI: INFANTRY-ARTILLERY TEAM

Artillery support of the infantry and immediate exploitation by the infantry of the effects of artillery fire are of decisive importance. Infantry that acts without regard to the artillery injures itself.

WHEN INFANTRY has room to maneuver, or is not faced by strong continuous resistance, it may be able to advance with little or no assistance from tanks and artillery. This situation may arise when the enemy is not determined to hold, or after the rupture of his position. On the other hand, when confronted by determined resistance from a strong enemy who is well equipped with machine guns, infantry requires all possible assistance from the auxiliary arms, particularly the powerful help of the artillery, in order to have any chance of success.

In our problems and exercises we have developed a liaison technique which permits infantry-artillery teamwork, but does not insure it. Mere physical and intellectual liaison between these two arms is not enough; there must be moral liaison as well. The infantry must know and trust the artillery; the artillery must know and trust the infantry.

Let us examine some of the many difficulties the infantry-artillery team meets in the attack. Let us assume that a battalion has an artillery liaison officer with it, that the telephones are working, and that in the initial stages of the attack the artillery can fire its concentrations either on a time schedule or by direct observation of the infantry's advance.

So far so good, or at any rate, not so bad. But now what happens if the infantry goes too fast, or not fast enough, for a time schedule of concentrations? What happens if it goes through terrain where it and the enemy are both lost to view of artillery observers?

Usually it will not be long before our battalion strikes a snag. The problem of infantry-artillery liaison then becomes acute. Pinned to the ground, platoon leaders have only a vague impression of the sources of hostile fire, and that impression may be in error.

Although it will seldom be true, let us assume that all officers are provided with adequate maps. Let us further assume that some of the enemy can actually be seen. Subordinate leaders must now transmit this information to the rear, together with the locations of their own units. Just how accurately will these platoon leaders be able to locate this hostile resistance on the map? How precisely will they indicate the positions of their own troops? Remember, this will not be done in the academic quiet of the map-problem room, but in the confusion and stress of battle; not on new, unfolded maps, but on maps that are muddy, wet and wrinkled from a thousand folds. Under such conditions, just how legible will this information be?

The message goes back by runner and eventually reaches the battalion commander. This officer still has to formulate his request and, through his liaison officer, transmit it to the artillery. Even if we assume that this message is clear and accurate and contains all that the artilleryman must know, there are still other factors to be considered. The message may be long and involved. The artillery has to receive it, may have to compute data, and then has to get on the target. Even if everything is accomplished with 100 per cent efficiency and good luck, how long will it all take? In exercises we do these things in a few minutes; in war they often take hours. The artillery may lack ground observation. The infantry's requests may be incomplete or inaccurate. Communications may break down. These and a thousand and one similar obstacles may arise that must be overcome before the artillery can come to the aid of its partner.

Here are the things that artillerymen must know: accurate location of the target; nature of the target, whether it is an enemy machine gun, a line of fox-holes, on a counter attack; the location of the front line of friendly troops; when the fire is to start; and, finally, when it is to stop. Unless it has this information, the artillery is in trouble. But how often and how fast can the infantry furnish this? Artillery observers seldom know all of it unless they are told. They can see something, but not everything.

As a result of the lessons of the World War, we shall probably avoid some of the more common errors we made then. For instance, the artillery liaison officer will certainly not be chosen for his use-

lessness to the artillery, as seems to have been done in some cases.

We have a good mechanism, we prepare and number the concentrations that are likely to be needed, and we are well-schooled in theory. But how many infantry units frequently participate in exercises in which artillery is represented, and infantry-artillery liaison emphasized, when there is anything beyond the transmission of a routine message or so? Has the infantry been practiced under battle conditions, in transmitting requests to the artillery quickly—requests that the artillery finds adequate for fire on unexpected targets?

Unless infantry considers the artillery in all its actions, it is headed straight for trouble!

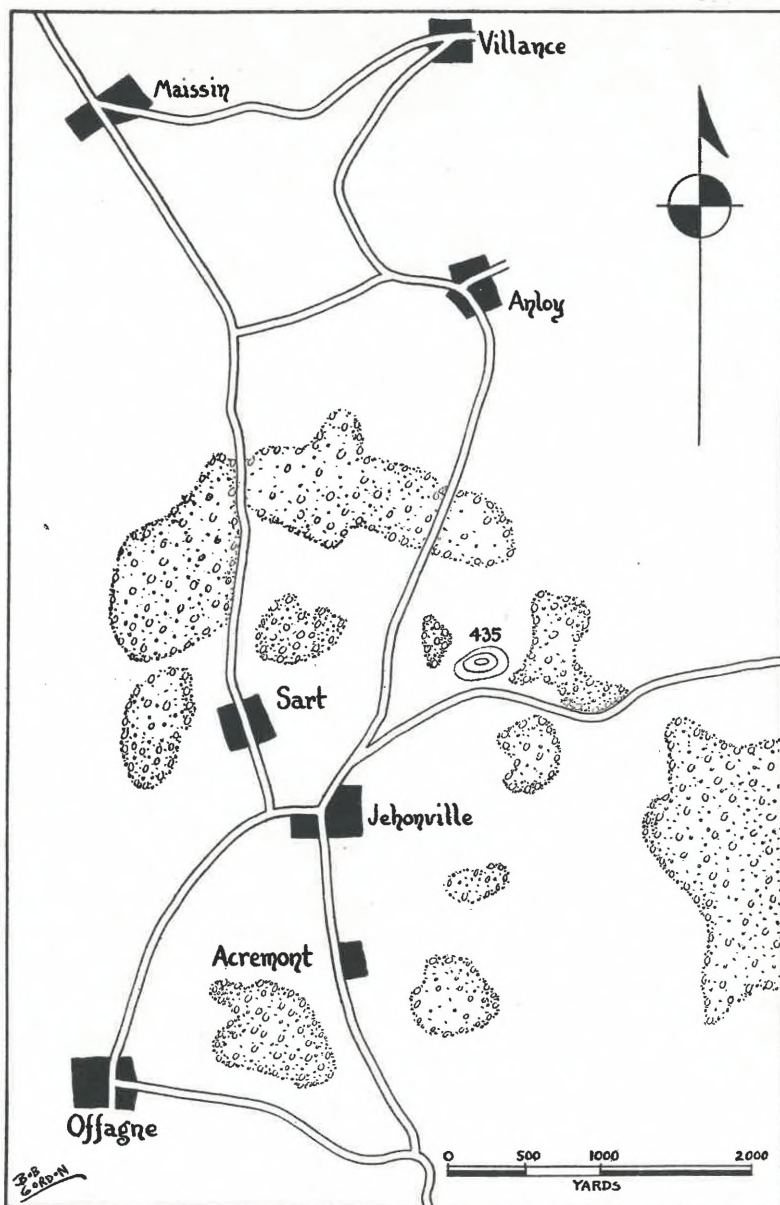
In many instances in the World War, artillery gave extremely effective support to the infantry. If we expect this to be normal we must make it normal. We must be prepared to deal with the difficult situation as well as the situation that solves itself. *The infantry-artillery team is not a fair weather partnership.* For this reason the historical examples that follow deal largely with situations in which infantry-artillery teamwork was not attained or was difficult to attain.

EXAMPLE I

On August 22, 1914, the French Fourth Army advanced northward in several columns. One of these columns, composed of elements of the XVII Army Corps, moved on Anloy via Jehonville. Although the situation was vague, the enemy was believed to have strong forces in the general vicinity of Maissin-Anloy.

The advance guard of the French column, a battalion of the 14th Infantry, pushed through the woods north of Jehonville. At the north edge it ran into a violent and well-adjusted system of enemy fires and was unable to debouch. The other battalions of the 14th quickly entered the line and attacked. Although the regiment attacked again and again, it was uniformly unsuccessful. Each effort was repulsed with heavy losses. Another regiment, the 83d, moved to the west through the woods and made an effort from that direction, but with no better result.

Meanwhile what was the artillery doing? There were three battalions of artillery in the column. One battalion passed positions from which it could act to the north of the forest, and as-



Example 1

sembled in close formation in a dip northwest of Jehonville; the other two, with their head at Jehonville, waited in route column for orders that never arrived. Of all this artillery only one battery went into position. This was located on the northwest slopes of Hill 435 behind a clump of trees. There was no observation post at hand that afforded a view north of the wood. At this time French wire equipment was so slight that observation had to be close to the guns. Nevertheless the battery was firing.

A staff officer of the 17th Corps rode up to the battery commander and asked:

"What are you firing on?"

The indignant artilleryman replied:

"I am firing on the order of the general and on nothing else." He had no target, and he was being very careful to fire "long."

From *The Combat of Infantry*, by Colonel Allehaut, French Army.

DISCUSSION

The French infantry acted as if the artillery did not exist. The artillery, for its part, failed to solve a difficult problem, but one that will be met frequently in war. There are lots of wooded areas in this world.

There was not the remotest indication of any infantry-artillery liaison here, and yet Colonel Allehaut says that perhaps the artillery did some good. He says:

"Let us not forget that on this part of the battlefield infantry was succumbing to the combined fires of German machine guns and artillery. The voices of the cannons of this one battery were all that bolstered this infantry's impression that it had not been abandoned to its tragic fate. Let us be convinced then, if, despite everything, the morale of the infantry of this column was rated among the best on this day, that it was due to the illusion of support created by this one battery firing 'into the blue.'"

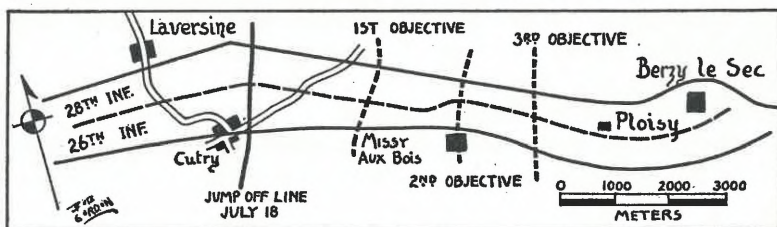
Illusion may be better than nothing, but when it comes to artillery support of infantry what is actually needed is *reality*.

EXAMPLE II

On July 18, 1918, during the Aisne-Marne offensive, Battery A, 7th Field Artillery, formed part of the artillery supporting the

28th U. S. Infantry, 1st Division. The initial artillery support was to take the form of a rolling barrage. Telephone wires had been installed, liaison detachments had gone to their respective headquarters, and H hour, 4:35 a.m., found the battery in position, prepared to take its proper part in the attack.

In this operation the artillery battalion commander had been ordered to accompany the infantry commander whom he was supporting; this in addition to the usual liaison officer furnished the



Example II

infantry. Since there was no executive officer provided at that time in the artillery organization the senior battery commander was detailed to act in this capacity in the absence of the battalion commander. The commander of Battery A took over this duty. The procedure had certain disadvantages. To quote Captain Solomon F. Clark, Field Artillery:

"Messages from the infantry came through the battalion commander. Messages, orders, fire charts, etc., from the artillery brigade, invariably came direct to the battalion C.P. near the batteries. In brief, this procedure practically deprived the artillery battalion commander of the ability to control his unit, and resulted, in those cases where it was entirely carried out, in command being assumed by junior officers for considerable periods of time."

At 4:35 a.m. the batteries opened. No caterpillar rockets were seen, so the artillery concluded that it was not firing short. Liaison officers soon reported that the barrage was satisfactory.

The attack progressed and Battery A displaced forward. On the way, a runner from the artillery liaison detachment met the battery. He delivered the following message:

From: Liaison Officer
To: B.C. Battery A.

The liaison detachment has captured a Boche 77 battery at (coördinates). They are marked "Battery A, 7th Field Artillery." Please have the limbers take them out.

2d Lt.

Liaison Officer

The liaison officer with his detail of a half dozen men, had gone over the top with one of the assault companies of the 28th Infantry. In the fighting near the Missy Ravine, the platoon to which he had attached himself became separated from the others. Soon the platoon commander found himself out of contact on left and right. The lieutenant, who had never fired a rifle, became engaged in a duel with a German sniper and was wounded in the arm. To quote Captain Clark: "It may be easily imagined that liaison under these conditions practically ceased to exist."

Late on the morning of the 18th the commander of the artillery brigade visited Battery A. He stated that the infantry had far outrun the artillery fire, that they were at that time near Berzy-le-Sec, and that their front line was beyond the artillery's maximum range. Reconnaissance parties were sent out and, after some time, determined the location of the front line. It was by no means as far advanced as Berzy-le-Sec. In fact, the infantry did not take that town until several days later.

From the personal experience monograph of Captain Solomon F. Clark, Field Artillery.

DISCUSSION

The 1st Division had been in training in France for more than a year, and had had six months' experience in the front-line. It had participated in a limited objective attack at Cantigny. It was accustomed to the idea of liaison officers and was determined to solve the problem of tying in its artillery with the infantry. Is it reasonable to expect that the average division will be better prepared?

At the start of the attack, liaison was perfect. The form of support, a rolling barrage, facilitated this at first. The rolling barrage, which lifts on a time schedule and moves forward, starts with the infantry, but thereafter it may be either too slow or too fast. In one case it retards the infantry; in the other it outruns them, failing to give support where and when support is needed. Therefore

"lifts" on a time schedule can solve the early part of the problem if the infantry and artillery have been coördinated beforehand.

The real trouble develops later. For instance, in the foregoing example, the artillery brigade commander was completely in error as to the location of the front-line infantry. It is obvious that unless artillery knows the infantry's location it is going to hesitate to fire. Yet, despite this natural reluctance, it is only necessary to read the personal experiences of front-line infantry leaders to realize that all too frequently artillery does fire on its own troops. In fact, General Percin of the French Army estimates that 75,000 French casualties were caused by French artillery during the last war. American artillery frequently faced the same indictment.

It is infantry-artillery liaison that seeks to remedy such conditions and that strives to promote a more smoothly functioning partnership. With this in mind when the artillery liaison officer reports to the infantry commander, there should be an immediate conference, and not a perfunctory one either. The infantry commander should thoroughly acquaint the liaison officer with the situation, and in turn be informed of the details of the artillery plan. Infantry should also arrive at a clear understanding of the work of the liaison detail itself. During the World War an infantry commander often told his liaison officer, "You stay here," and then promptly forgot all about him.

The artillery believes to-day that a liaison officer, unless definitely needed at the front to check or observe fire, should stay with the infantry battalion commander. The artillery liaison sergeant remains at the command post in the absence of the battalion commander and the liaison officer. He keeps abreast of the situation and is authorized to transmit requests for fire. If the liaison officer is at the command post, the sergeant goes to the observation post.

In the example we have just examined, the artillery liaison detail displayed great gallantry. They rivalled their infantry comrades in pushing forward against the Germans, but they did not do the job they were sent forward to do.

The infantry-artillery liaison mechanism existed then in much the same form it does to-day. The troops were better than the average that can be expected in the opening stages of any future war, and yet late in the morning of this attack "liaison practically ceased to exist."

Prearranged fires, assignment of specific artillery units to support specific infantry units, and the dispatch of liaison officers from artillery to infantry will not by themselves insure infantry-artillery teamwork.

EXAMPLE III

On August 20, 1914, the 59th French Division held a position near Nancy facing north, with outposts generally along the Seille. One battalion of the 49th Field Artillery, facing north and north-east, was located near Mt. Toulon and Mt. St. Jean. The 28th Battery was at B-1 with its observation at O-1, 300 meters in advance. The 27th had its observation on Mt. Toulon, and the 29th, farther east, had its observation on the spur to its front. The terrain permitted observation far to the front and to the east.

On the morning of August 20 the officers of the 28th and 29th Batteries were at the observation post of the 29th Battery with their battalion commander. To the east they heard an uninterrupted cannonade. It was known that the French Second Army had advanced in that direction. The 59th Division remained facing toward Metz. Beyond this the battery officers knew nothing of the situation.

About 10:00 a.m. a single shrapnel and a little later a salvo burst over Nomeny, where a French infantry company was on outpost. The captain of the 28th Battery rushed back to his O.P. The cannonade on Nomeny became more intense, then a sharp fusillade was heard. The artillery saw nothing at which to shoot. Where were the French infantry of the 277th which was to the front? Some movement was noticed near Manoncourt. Men moved singly from the Seille toward the high ground to the south, then thin lines moved in the same direction, halted, and were hidden by the wheat.

Actually one battalion of the 277th Infantry had been strongly attacked and had fallen back and abandoned Nomeny, which had caught fire. At 11:00 a.m. this battalion was reinforced by another and a violent combat ensued on the front: Nomeny-Manoncourt. But of all this the artillery was ignorant.

About noon the commander of the 28th Battery received an order through a liaison agent to open fire "to support the infantry

Manoncourt-Nomeny Road; therefore in firing beyond that road (range more than 5000 meters) there could be little danger to his own infantry. He chose a green field which stood out amid the yellow wheat and by progressive fires searched a wide area from the road to the stream. Enemy artillery fired on Mt. St. Jean and Mt. Toulon.

The rifle fire to the front died away. Soon afterward a battalion of the 325th French Infantry, which had been in reserve, moved forward by the road in the vicinity of the 28th Battery. The battery commander found some personal friends in this battalion and, from them, learned that the 325th was to relieve the 277th and attack toward Nomeny. By this accidental conversation, he learned what had happened and what the infantry planned to do.

Shortly after this the 28th Battery was ordered to accelerate its fire "to support the infantry toward Nomeny." The battery moved to B-2. From here the captain could see Nomeny and its environs.

About 4:00 p.m. he saw the 325th deploy one battalion on each side of the road and advance. The artillery placed fire in front of the 325th, on the plateau which fell toward the Seille. The infantry was enabled to advance. By dark it had nearly reached the Seille.

From the article in the *Revue D'Infanterie*, August, 1925, by Major de la Porte du Theil, French Army.

DISCUSSION

Here the striking things are the absence of coördination between infantry and artillery, the lack of any precise missions given to the batteries, and the ignorance in which the artillerymen were left during the battle.

It was only through an accidental encounter of old friends that any information reached the batteries. There was no detachment charged with maintaining liaison. How much time would it have taken the infantry near Manoncourt to get a request for fire back to Mt. Toulon?

The artillery here had splendid observation, still its targets were far from conspicuous. It was forced to search areas where it thought the enemy might possibly be located. To a certain extent the action of the infantry and artillery was coördinated—but only because personal friends had accidentally met.

EXAMPLE IV

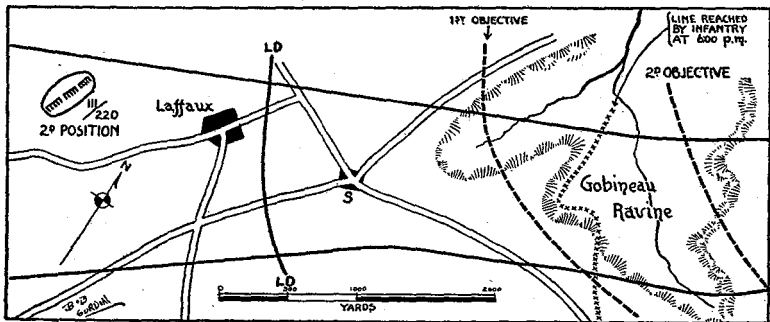
Let us skip four years.

In 1918 the same artillery battalion of the 49th Field Artillery had, in the expansion of the French Army, become the 3d Battalion, 220th Field Artillery. On September 14, 1918, it took part in a carefully prepared attack to the northeast.

Artillery support of the infantry was to be in the form of a rolling barrage, artillery units were assigned in direct support of infantry units, batteries were given precise missions, the artillery's command posts were located near the command posts of the infantry they supported, liaison detachments were furnished the infantry, displacements were planned in advance, and everything worked out on an elaborate time schedule. Let us see what happened.

The 165th French Infantry and a battalion of marines were the attacking elements of the division. They advanced at 5:50 a.m. The initial stages of the attack were successful. The artillery fired its barrage on schedule. At 8:20 a.m. the barrage reached the second objective. In accordance with orders the 3d Battalion, 220th Field Artillery, displaced forward. It was not expected to shoot again until 10:50, but was in its new position a kilometer west of Laffaux by 10:00 a.m. There it received orders to fire—not on targets beyond the second objective but on the Gobineaux Ravine, much closer than that objective.

The infantry had not reached the second objective. It had been held up since 8:00 a.m. between the first and second objectives.



Example IV

The barrage had rolled on. The liaison details took more than an hour to acquaint the artillery with this situation. Artillery fires then had to be moved back toward the rear. The location of the French infantry still remained uncertain.

All morning efforts were made to renew the advance. The artillery supported these attempts by firing on areas on the east slopes of the Gobineaux Ravine. It was useless. At 6:00 p.m. the infantry was still in the immediate vicinity of the position it held at 8:00 a.m. Several days elapsed before the French were able to resume their advance.

This operation was minutely prepared, but it was not possible to know in advance exactly what would happen. All details had been worked out on a time schedule, according to the concepts of the French command. When the rhythm was destroyed, it was difficult to tie in the artillery with the infantry. The latter lacked support when it needed it most.

Despite its signals, its pyrotechnics, and all other means of communication at its disposal, the liaison detachment took more than an hour to get word to its artillery of the existing situation. Even then the information was incomplete. Let us quote Major du Theil.

"Only one thing was lacking—a knowledge of exactly where to fire.

"The Gobineaux Wood and ravine are large. Tons of steel could be poured out there without reaching the few machine guns that stopped the 29th Division's infantry.

"Who knew exactly where those machine guns were? Who could say? Maybe a few infantrymen of the 165th saw them. But no one could locate them exactly, much less direct the fire of a battery on them effectively, or send to the captain, two or three kilometers to the rear, the necessary information.

"The liaison detachments managed to transmit the approximate location of the lines. That was something. In an hour it was possible to bring back the barrages. Efforts were made to move out again—blind efforts. At no moment did we have precise fires, fires that kill the adversary aimed at, and which open the breach at the appointed place, as at the start of the attack.

"Between 1914 and 1918 we had gone far. Nevertheless the experience of the war shows that the solution to this problem is not always effective in its present form."

Perhaps we may never be able to turn out a perfect solution to the problem—perfection of execution is seldom encountered in war—but we can overcome many difficulties that handicap infantry-artillery teamwork.

EXAMPLE V

The French Fourth Army, after suffering a reverse in the Battle of the Frontiers, withdrew slowly in the latter part of August, 1914, and made a stand on the Meuse.

On August 27 the 87th Infantry Brigade, which had been in reserve near Beaufort and Beauclair, moved forward to take over a sector generally extending between Cesse (inclusive) and the Forêt de Jaulnay. Its mission was to prevent the enemy from debouching west of the Meuse. Limits of the sector were not precisely defined. It was understood that French outposts held the line of the Meuse. Fourteen batteries of field artillery under an artillery regimental commander were attached to the 87th Brigade for the operation.

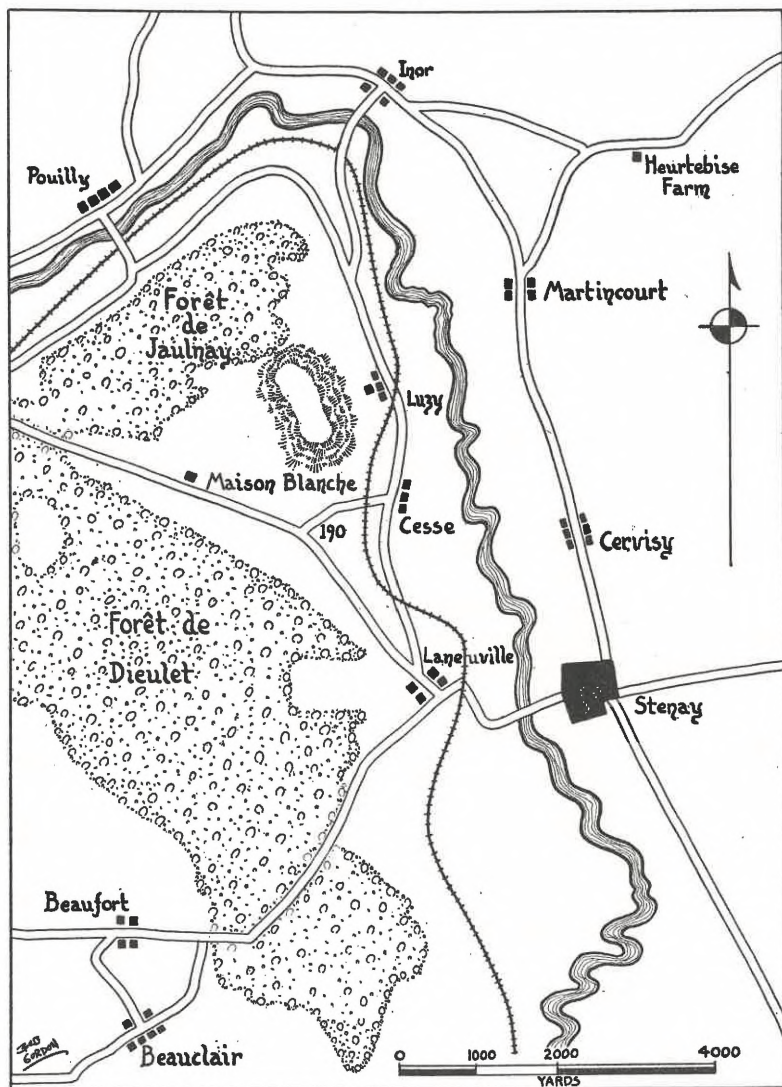
The brigade itself consisted of the 120th Infantry Regiment and the 9th and 18th Battalions of Chasseurs. The 18th Chasseurs were directed to occupy the woods just south of the Forêt de Jaulnay, the 9th Chasseurs were ordered into a position south of the Maison Blanche Inn, and the 120th Infantry was held in reserve.

The forward movement to these locations was made in a dense fog. The question of positions for the artillery was difficult. The woods were very thick, and from their edge the ground descended to the Meuse. It was finally decided to place all the artillery in a clearing about 800 yards wide in the Forêt de Dieulet. This position afforded excellent observation to the front.

As the result of previous successes in which artillery had played a large part, the 87th Brigade commander was strongly impressed with the necessity for artillery support of the infantry.

About 8:00 a.m. the fog lifted. German heavy artillery near Cervisy shelled the French position, blew up a caisson, and caused some losses. Because of the long range, the French artillery did not reply.

Through his field glasses the brigade commander noted some dark uniforms to the left front, and, accompanied by the artillery



Example V

colonel and a signal detail, went in that direction on a personal reconnaissance. He thought the troops seen were his own 18th Chasseurs. Instead he found troops of the II Colonial Corps, the

unit on his left. He met a lieutenant whom he asked to explain the situation.

"General, we are at the place where the Beaumont-Stenay road enters the Forêt de Jaulnay. The Maison Blanche Inn is 500 yards from here. Two kilometers farther in the same direction you can see some houses. That is the village of Cesse. The Forêt de Dieulet is behind us, and to our left front is the Forêt de Jaulnay. We have a post of Colonial Infantry at Maison Blanche. A battalion of the regiment of Colonel M, which occupies those trenches to your right toward that hill, 190, furnishes the post at Maison Blanche.

"I belong to the regiment of Colonel L. We have one battalion in the Forêt de Jaulnay which is to advance in the woods as far as the Inor bend, while the other two battalions under the colonel attack with their left flank on the edge of the Forêt de Jaulnay, in the direction of Luzy. Luzy is just behind that crest you see on the horizon."

"What information have you of the enemy?"

"Cesse, Luzy, the Inor bend of the Meuse and Pouilly are occupied by the enemy. Our outposts have been driven from that crest this side of Luzy and the colonel is moving out to attack the crest which he wants to hold. The Germans are on the military crest now."

"Tell your colonel to hold up his attack until my artillery can get in liaison with him and support his attack," directed the 87th Brigade commander.

The artillery colonel who had accompanied the 87th Brigade commander had a telephone wire connecting him with his batteries in the clearing. He installed a telephone at an O.P. and began to describe the situation to his commanders.

The lieutenant reached the Colonial colonel in time to stop the attack. The colonel rushed to join the 87th Brigade commander, and a new plan was arranged. Two artillery battalions were to shell the Luzy crest while a third shelled the edge of the Forêt de Jaulnay.

The patrols of the Colonial Infantry had moved forward in a thin line. The military crest of the ridge west of Luzy was held by a strong German firing line supported by several machine guns. This line opened a heavy fire on the French patrols. The French

Colonial Infantry waited in rear, while the French batteries registered on the crest.

After a few minutes word came back from the artillery that everything was ready. The artillery knew the infantry plan and could open fire for effect at a moment's notice.

"You can go now, Colonel," the 87th Brigade commander told the Colonial.

However, before the French movement got under way the Germans attacked. Their firing line executed rapid fire for two minutes and then rushed forward. Behind the crest that had sheltered them, the German supports and reserves followed. The three German lines were about 300 yards apart. The French artillery was silent until the German reserves had gotten well beyond the crest.

Suddenly the French artillery opened fire for effect. Heavy losses were inflicted and the Germans thrown into confusion. The French infantry now attacked, completely scattering the dazed Germans. In less than 20 minutes the French were near Luzy. Their losses were slight while those of the routed Germans were heavy.

The Germans still held Cesse. The 87th Brigade commander therefore decided to attack this village with the 9th Chasseurs and one battalion of Colonials.

"It's going to be tough," a Colonial remarked to the 87th Brigade commander. "There's a whole line of walls there near the village. The Germans sheltered behind them will shoot us up."

The 87th Brigade commander desired to humor the Colonials and restore their confidence. They had met with a disaster a few days before.

"Not at all," he replied. "You will go into Cesse with your hands in your pockets, and I will go with you, my hands in mine."

The two attacking battalions formed; the artillery was informed of the plan. The entire fourteen batteries supported the attack by fire on Cesse and its environs. The Germans in Cesse were taken under a powerful concentration and sustained severe losses. To quote the French brigade commander: "We reached Cesse with our hands in our pockets."

From *A Brigade in Battle* by General Cordonnier, French Army.

DISCUSSION

The Germans had crossed the Meuse on the morning of the 27th, therefore the French, in accordance with their mission, attacked. The Colonial infantry was about to go it alone. The intervention of the 87th Brigade commander, who belonged to another army corps, resulted in excellent infantry-artillery teamwork. The infantry brigade commander and his artillery colonel rapidly coördinated their artillery with the Colonial infantry. The brigade commander ordered the coördination. The artilleryman acted both as an artillery commander and as his own liaison officer.

The essential points are as follows:

(1) The commander on the spot was deeply impressed with the vital necessity for infantry-artillery teamwork.

(2) The infantry knew the location of the Germans.

(3) A representative of the artillery was with the infantry and got this information from them. He was also informed of the infantry plan.

(4) He had instantaneous communication with the artillery, and was thereby enabled to transmit this information promptly.

(5) Artillery observers had an excellent view of the terrain and could identify the targets and objectives from the description given over the phone.

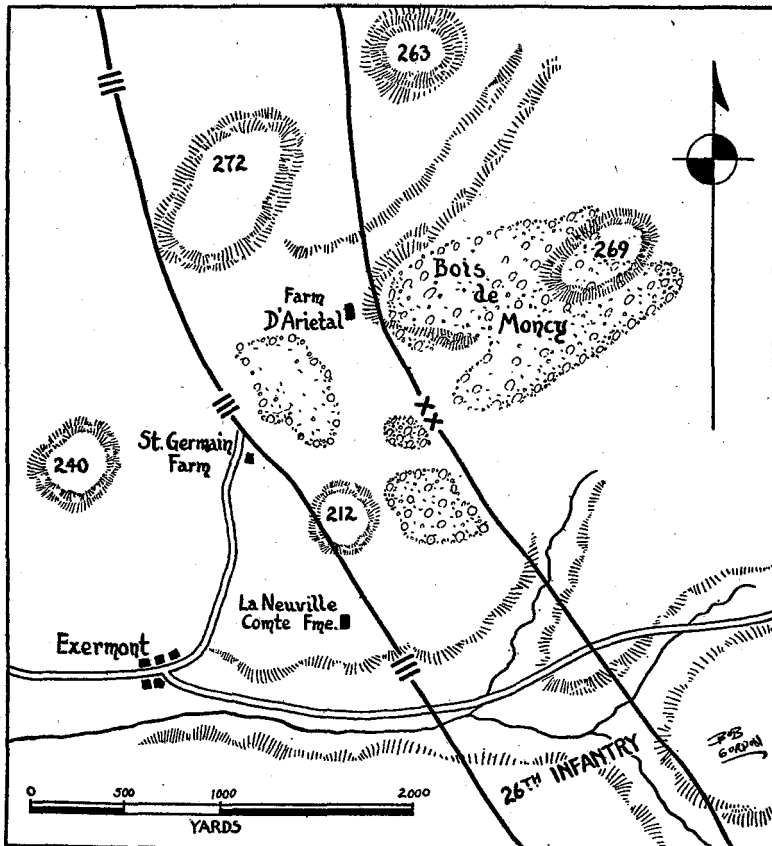
(6) As a result of the intervention of the 87th Brigade commander, the infantry and artillery were coördinated as to time. The infantry attack was not launched until the artillery was ready to fire for effect. Everything had been hastily improvised, but that is often necessary. In this case it was effective.

General Cordonnier, in commenting on the combats of the 87th Brigade in August, 1914, says:

"The artillery with this brigade had been loaned by the division or the army corps. Sometimes the brigade had one artillery unit, sometimes another. Each time it was necessary to arrive at an understanding in advance. It was only with the Stenay battalion (which had trained with the 87th Brigade in peace) that one could go into action without feeling one's way and without fear of being misunderstood. The best results are obtained only if infantry and cannoneers are accustomed to working with each other."

EXAMPLE VI

On October 4, 1918, the 1st U. S. Division launched its attack in the great Meuse-Argonne offensive. By noon the following day the 1st Battalion, 26th Infantry, had captured Hill 212 and the woods east of that hill. At this time the 3d Battalion, 26th Infantry, which had been in reserve, was ordered to advance, pass through the 1st Battalion and continue the attack. At 1:15 p.m. the relieving battalion reached the forward lines of the assault units.



Example VI

Here the battalion commander was informed that a barrage would be laid on the southwestern portion of the Bois de Moncy. This wood dominated the valley from Hill 212 to Hill 272, which would have to be crossed in the advance. The barrage was scheduled to come down at 1:45 p.m., stand for 15 minutes, and then roll forward. To quote the battalion commander:

"This necessitated a nerve-racking wait of 45 minutes under heavy artillery and machine-gun fire delivered at short range from across the valley, and enfilade fire of all arms from the Bois de Moncy, but it was too late to do anything about it."

The battalion advanced successfully behind the barrage and fought its way forward against strong opposition to a point south of Hill 272. To quote the battalion commander again:

"During all this time the artillery liaison officer who had accompanied the 3d Battalion commander did excellent work. He controlled the fire of two guns that were located southeast of La Neuville Comte Farm. He had direct telephonic communication with these pieces. Instead of giving targets to his guns, this unusually competent officer issued fire orders from wherever he happened to be. He thus destroyed many machine guns and two pieces of artillery. His fire could not only be directed on all targets to the front, but on targets located along the Bois de Moncy as well."

Later, while the battalion was attacking Hill 272 from the east, the Germans counterattacked toward its flank and rear. The battalion commander, through the liaison officer, asked the artillery to fire a numbered concentration which had been previously prepared to cover the area over which the Germans were advancing. The fire came down promptly and was effective.

From the personal experience monograph of Major Lyman S. Frasier, Infantry, who at the time commanded the 3d Battalion, 26th Infantry.

DISCUSSION

We see here an example of good infantry-artillery liaison. The bulk of the supporting artillery was used to fire a rolling barrage in accordance with the general artillery plan. In the future we shall probably make little use of the rolling barrage. The form of support will be different. Nevertheless, at the start of an attack artillery will fire according to some general plan.

By October, 1918, the 1st Division was a veteran organization. It had learned much about infantry-artillery liaison. The remarks of the battalion commander speak for themselves.

Some enemy machine guns, as well as two field pieces located well forward, were not neutralized by the barrage. Prearranged fires will never put out all hostile machine guns. Sometimes machine guns will remain silent until the infantry has gotten close. In this example the artillery liaison officer was with the infantry battalion commander and in direct communication with the artillery. He personally conducted the fire on these machine guns. His method was a short cut which probably should not be resorted to habitually. In any event, the infantry got artillery fire when and where it needed it. The effectiveness of the artillery support is all the more notable when we learn that the 1st Division in this operation did not have as much artillery supporting it as was usual in 1918 Western Front attacks.

This example also brings out the fact that once artillery fire had been called for, infantry must wait until it has been delivered or else run the risk of being fired on by its own guns. It further suggests that infantry that has requested fire should be promptly informed if and when it will get such fire.

The British Army Quarterly, in articles in the January and April issues of 1924, describes the opening of the British attack at the Battle of the Somme, July 1, 1916. The attack was preceded by a heavy artillery preparation which lifted at 7:30 a.m., the hour at which the infantry attacked. British front lines were at varying distances from the German front trenches.

It is pointed out that the British succeeded initially in those instances in which their infantry left the front-lines before 7:30 a.m. and, under the protection of the artillery bombardment, advanced within 200 yards of the German front line. These troops laid down in the open when within 200 yards of the enemy's position, waited for the artillery to lift and then rushed the forward trenches. Practically every time that such methods were used the first line was carried with only slight losses.

In contrast is the experience of the 96th British Brigade south of Thiepval. This unit has several hundred yards to negotiate in order to reach the German position. It advanced at 7:30 a.m.,

the time of the artillery's first lift. The 180th German Infantry, to its front, was thereby afforded time to man its defenses. It opened heavy rifle and machine-gun fire while the British, still 200 yards away, were advancing in vulnerable wave formation. The 96th Brigade was repulsed with heavy losses.

In other words, when the British infantry *promptly* exploited the effects of the artillery fire, it succeeded at slight cost; when it failed to do this, it was repulsed.

CONCLUSION

A study of the early Franco-German engagements in 1914 reveals the striking fact that virtually no unit that effectively tied in its infantry and artillery suffered a severe reverse. On the other hand, where severe reverses were suffered, the loser had invariably failed to coördinate his artillery with his infantry. It would be an exaggeration to say that, in the early days of 1914, all a commander had to do to win was to achieve infantry-artillery teamwork, but nevertheless such a statement would not be far from the truth.

The phrase "The artillery conquers; the infantry occupies" was coined when trench warfare began. It was not true, as the officer who originated it undoubtedly realized. But it did represent the reaction to numerous reverses that were attributed to the artillery's failure to support their attacking infantry properly. It focused attention on what might be called ARTILLERY-infantry teamwork. When this was changed to the infantry-artillery team, decisive results began to be achieved.

The importance of infantry-artillery liaison is undeniable; the real question is "How can the action of these two arms be tied together on the battlefield?"

Any intervention of direct support artillery, which has not been foreseen and prepared for, requires a long delay. A small operation is involved which takes time. Having once asked for this fire, infantry must wait until it materialized, or run the risk of being fired on by its own artillery. Although artillery will try to comply with all requests for fire, the supply of artillery ammunition is by no means unlimited; it is important to remember this. For these reasons, infantry should try to settle local incidents with its own weapons, leaving the artillery to fire on larger targets in

accordance with the previously arranged scheme. On the other hand, when a real need exists for artillery fire on some particular place, infantry should not hesitate to ask for it.

Infantry that is accustomed to working with a definite artillery unit has the opportunity to arrange certain conventions. For example, short cuts in messages requesting artillery support (arranged in a definite sequence) might be used in cases that cannot be covered by numbered concentrations. As an illustration, a French artilleryman has suggested something similar to the following (French abbreviations changed):

TC 19.4-19.6 W 400 D 200 MGs DRI 300 Min 5 B 9:30.

This might be translated as follows:

The center of the target is at 19.4-19.6. Area on which fire is requested is 400 yards wide and 200 deep. Target consists of machine guns. Our Infantry front line is 300 yards in rear of the front edge of area to be fired on. Fire is requested for 5 minutes, starting at 9:30 o'clock.

He also suggests such variations in designating targets as polar coördinates, and reference to prominent landmarks when gridded maps are not available.

Conventional signals might be arranged to insure the immediate execution or renewal of certain fires. The duration of any particular fire asked for by the infantry might habitually last for a definite period of time—three minutes for example—unless otherwise requested. The artillery might signal the fact to the infantry that it is about to cease certain fires by some peculiarity in its fire at the end—greater rapidity the last minute, a long salvo, a smoke salvo, or a high bursting salvo. Individual infantrymen, lying down, need some such warning—something they can see or hear. These are but a few suggested conventions that might be used; the number is limited only by the ingenuity and familiarity of the units involved.

If the physical distance, and sometimes greater mental distance, that separates the infantry and the artillery on the battlefield is to be spanned, the following considerations should be observed:

Habitual designation of definite artillery units to support definite infantry units.

Intellectual liaison and mutual familiarity between the arms,

so that infantry will not call on artillery to do the impossible, the unnecessary, or the unsuitable; while the artillery, for its part, will be capable of appreciating the infantry's problems.

Determination by the artillery to support the infantry when support is needed, even at some cost, and to seek OP's that will enable artillery observers to follow the combat by direct observation.

Use by the infantry of its own weapons against small targets that are difficult to describe to the artillery, thereby freeing the artillery to fire on larger targets.

Recognition by the infantry that prompt advantage must be taken of opportunities afforded by artillery fire.

Proximity of infantry and artillery leaders in combat, with command posts as close together as feasible.

Particular attention to communications.

A moral liaison, reciprocal esteem, confidence and friendship, preferably personal friendship between the two elements of the particular infantry-artillery team.

Previous and joint training of the two specific units of the team.

Careful selection and actual training with infantry units of artillery liaison officers.

Maximum use of prearranged fires.

CHAPTER XXVII: NIGHT ATTACKS

Success in a night attack depends upon direction, control and surprise.

THE MOST careful preparation is essential. A thousand and one contingencies that an attack by night gives rise to, must be foreseen and provided for. Especially must meticulous provision be made for maintaining direction, for preserving control and for insuring the utmost secrecy until the attack is within assaulting distance.

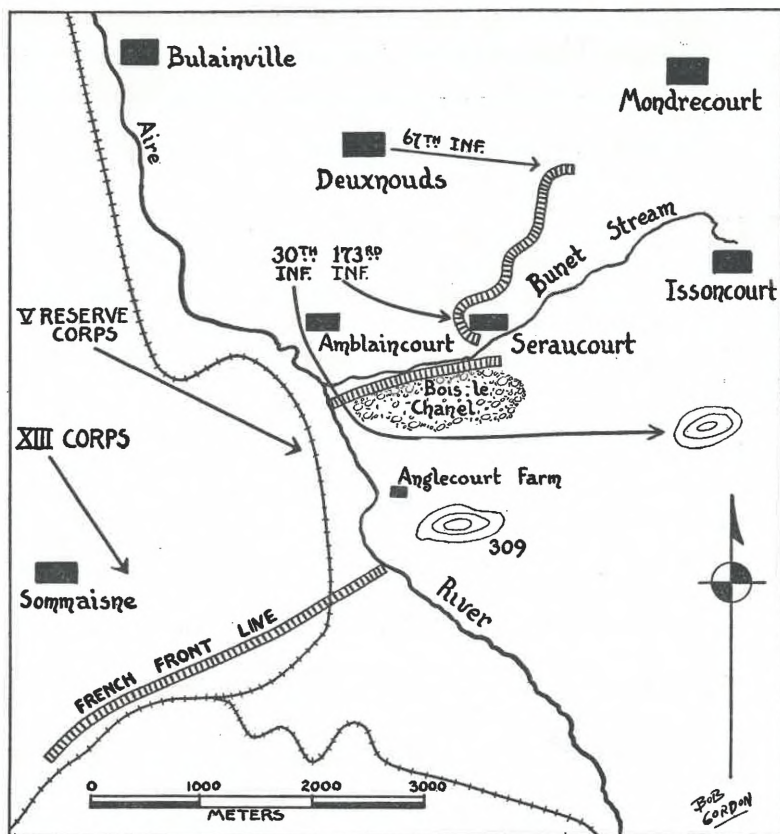
Owing to the power of modern armament, night attacks will probably be more frequent in future conflicts. Positions which infantry have failed to take by day may sometimes be successfully stormed by night. Particularly will darkness aid in the passage of areas that enemy fire denies by day. They seem to offer a solution to the problem of how to get attacking troops forward without the heavy losses incident to a daylight advance against an enemy in position.

Night attacks have their place but they are by no means a panacea for avoiding the difficulties of modern combat. They present many difficulties all their own. Imperfectly trained and partially disciplined troops will seldom succeed in these operations. Even seasoned veterans, led by experienced commanders, have often failed dismally to overcome the dangers of the dark.

EXAMPLE I

In 1914, during the first days of the Battle of the Marne, the German Fifth Army suffered so heavily from French artillery fire that the infantry was unable to close with the enemy. In order to come to grips, the army ordered an attack for the night of the 9-10 of September on a front of 20 kilometers. Portions of four army corps participated. One of the units engaged in this action was the 30th Infantry of the 34th German Division.

On September 9 this regiment, which had just received a number of replacements, was in reserve near Bulainville. That afternoon the colonel received the division attack order. In this order the 30th



Example 1

Infantry was directed to launch its attack from the vicinity of Amblaincourt, which was believed to be occupied by the French. The small hill about 1,800 meters southwest of Issoncourt was assigned as the regimental objective.

Realizing that the Bunet stream would have to be crossed, the colonel promptly dispatched an officer's patrol to reconnoiter for crossings. Before dark this patrol returned with the necessary information.

At nightfall the regimental commander assembled his officers and issued his order. The regiment would attack with the 2d and

3d Battalions abreast, the 2d on the right. The 1st Battalion would be in reserve. The 2d Battalion was to move forward along the west edge of the Chanel Wood and then turn eastward following the south edge toward the objective. The 3d Battalion would move on the objective by guiding on the north edge of the wood. Weapons would not be loaded and there would be no firing. Silence was mandatory. What commands had to be given would be transmitted in whispers. The progression of first-line battalions would be made "with units well in hand, preceded by a thick line of skirmishers."

By midnight the 30th Infantry and adjacent troops had reached attack positions north and west of Amblaincourt without alarming the French. Rain was falling.

The advance was started. As the leading elements neared Amblaincourt there was a sudden burst of firing. Immediately every one rushed toward the town. There were no French there. In the confusion some straw piles near by caught fire, revealing the milling Germans to the French who actually occupied the Chanel Wood and who promptly opened a heavy fire. The German assaulting units forthwith fell into the greatest disorder, and the 30th Infantry became intermingled with the 173d on its left.

In spite of the confusion and the heavy fire, most of the men of the 30th and some of the 173d pushed on toward the dark outline of Chanel Wood. They crossed the Bunet stream, the water reaching to their breasts and sometimes to their necks. Emerging from the stream they charged the wood in one confused mass. They reached the edge and hand-to-hand fighting followed. German accounts state that an irregular fire came from all sides, that no one knew friend from foe. Neighboring units had lost direction and there were even men from other army corps mingled with the troops of the 30th. About 2:30 a.m. the Germans were in possession of the Chanel Wood, but their losses had been terrific. The history of the 30th Regiment says:

"The most complete disorder reigned in the units after the incidents of the Chanel Wood. Near Anglecourt were moving units of the 30th, 173d, 37th, 155th, and even Wurtembergers (XIII Corps). Officers strove to organize at least squads or half platoons but the smallest group, as soon as formed, became lost in the obscurity. It was only at the south edge of the Chanel Wood that

sufficient order was reestablished to continue the advance.

"The 8th Company managed to push on and capture several cannon after a hand-to-hand fight with the gunners. Unfortunately, they had to withdraw soon afterward, having come under an intense fire from their own comrades."

At daybreak the 30th Infantry, completely intermingled with the 173d, held the line: northeast corner of the Chanel Wood—Hill 309. Although High ground had been gained, the attack was considered a failure.

On September 12 a German colonel who commanded a unit in the same division with the 30th, met the German Crown Prince, who commanded the Fifth Army, and asked permission to speak frankly regarding this attack. This being granted, he said:

"Imperial Highness, one more night attack like that one and the army will be forever demoralized."

From the article in the *Revue D'Infanterie*, August, 1927, by Colonel Etienne, French Army.

DISCUSSION

The history of the 30th Infantry refers to this night as "St. Bartholomew's Eve." In the memory of the survivors, it was the most terrible of the entire war.

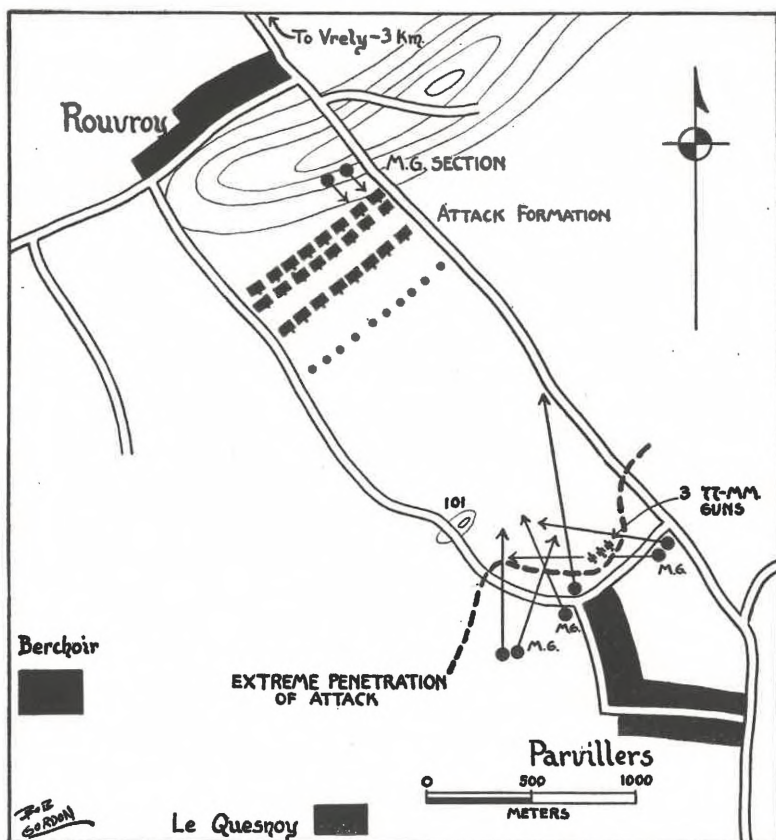
Although the German troops fought with incontestable bravery, and although they achieved miracles, the action was doomed before it began. Subordinate commanders were not given the opportunity for daylight reconnaissance. The infantry was not opposite its objective at the jump-off. The objective itself was more than 6,000 meters away with the intervening terrain unknown. As a crowning touch the regiment was ordered to execute an abrupt change of direction—this in the dead of night and at the height of the attack. To demand that the 30th Infantry, in a night attack, take Amblaincourt, capture the Chanel Wood, then change direction and push on to a distant objective, meanwhile maintaining control, was more than demanding the impossible; it was presenting an unequivocal invitation to disaster.

Night attacks must have limited objectives. The results may be exploited by day.

EXAMPLE II

On the night of the 6-7 October, 1914, the French 2d Battalion of Chasseurs moved by truck to Vrely, where it arrived at 7:00 a.m. There it was attached to the 138th Brigade. At 2:30 p.m. it was ordered to march via Warvilliers on Rouvroy-en-Sauterre in order to participate in a night attack by the 138th Brigade. Another attack, coördinated with this, was to be launched from Bouchoir toward Le Quesnoy.

The 138th Brigade planned to attack with the 254th Infantry on the right, the 2d Chasseurs on the left and the 251st Infantry in re-



Example II

serve. The dirt road between Rouvroy and Hill 101 was designated as the boundary between the 254th and the 2d Battalion of Chasseurs. The terrain between Rouvroy and Parvillers was flat and presented no difficulty to movement at night.

The 2d Chasseurs was an élite organization. However, as a result of previous fighting, it was reduced to an effective strength of approximately 150 men per company. Most of the battalion's six companies were commanded by noncommissioned officers.

At 5:45 p.m., with dark closing in, the battalion moved forward through Rouvroy. Not more than a hour had been available for reconnaissance. Information was vague. It was believed that Parvillers was held by the Germans.

The 2d Chasseurs formed for attack as follows: Two companies were deployed in one long line of skirmishers, preceded by patrols. Four companies followed in second line. These four companies were abreast, each having two platoons leading and two following. Platoons were deployed in line of skirmishers. The distances ordered were:

150 yards from the patrol to the first line.

200 yards from the first line to the second line.

50 yards between leading elements of second-line companies and their supports.

The machine-gun platoon was placed 50 yards behind the left of the third line.

Shortly after dark the battalion advanced on Parvillers. As the advance neared Hill 101, one of the patrols ran into an enemy out-guard which promptly opened fire. Many of the French answered this fire without knowing what they were shooting at or why. Soon firing became general.

The two leading companies halted. A cry of "Forward" ringing through the darkness was caught up and echoed by hundreds of voices. Abruptly the second-line companies rushed forward, racing toward Parvillers. Pell-mell, they charged through the leading companies, one of which followed. A terrific uproar ensued, punctuated with shouting and cheering.

The rush reached a trench 250 yards northwest of Parvillers. The defenders had fled, leaving weapons and equipment, but the enemy farther in rear had been warned. Suddenly three 77-mm. cannon,

150 yards behind the trench, opened at point-blank range on the French. By the flashes artillerymen could be seen serving the guns. The French in front of the battery stopped, but those on the right closed in and captured the three pieces.

In great disorder the advance continued toward the village. As they moved forward their left flank came under fire of hostile machine guns located on the road 600 meters northeast of Parvillers. By this time all French units were hopelessly intermingled, many company and platoon commanders had become casualties and in many places, confused by the dark, the French were firing on their own troops. The attack wavered and stopped.

It was 11:00 p.m. With much difficulty noncommissioned officers rallied a few scattered groups and occupied the conquered trench. It was realized that further concerted action by the battalion was impossible.

Meanwhile the right assault company, which had not followed the general movement, was still under partial control. The battalion commander ordered it to a central position 600 yards in rear of the trench to cover the withdrawal of the battalion. When the order to withdraw was given, voices, whistles and bugle calls were heard. Firing continued during the entire movement but eventually the battalion managed to extricate itself and reform in rear of Rouvrois. It had suffered in the neighborhood of three hundred casualties.

The entire French attack failed.

From an article in the June, 1924, *Revue D'Infanterie* by Lieutenant Colonel Jeze, French Army.

DISCUSSION

In this engagement the French solved the problem of direction but failed completely in the co-existing problems of control and surprise.

As a matter of fact the direction phase practically solved itself, for the road paralleling their advance on Parvillers made any great loss of direction virtually impossible. Unfortunately, no kindly terrain feature could eliminate the remaining difficulties.

It was inevitable that the widely scattered formation they adopted should result in loss of control. At night, distances and intervals

must be diminished and formations kept compact. In this instance section columns or even larger groupings would unquestionably have gone a long way toward keeping the battalion in hand. Particularly was a compact formation mandatory here where most of the company and platoon leaders were noncommissioned officers with little or no experience.

The patrol which encountered the hostile outguard on Hill 101 should have closed with the bayonet without firing. It failed to do this, and firing soon became general. The usual results followed with clock-like precision; once started, the firing could not be stopped; officers were unable to get the leading elements to continue the advance, and the attacking units fired into their own troops.

The second-line companies, with due courage, but with undue cheering and firing, charged. The tumult, the firing and the onrush of hundreds of men from a distance gave the Germans ample warning. It was an attack—an assault that had started too far off. The French lines, revealed by their cheering, were swept by hostile machine-gun fire. In the utmost confusion the assault wavered to a halt and shortly afterward the battalion withdrew.

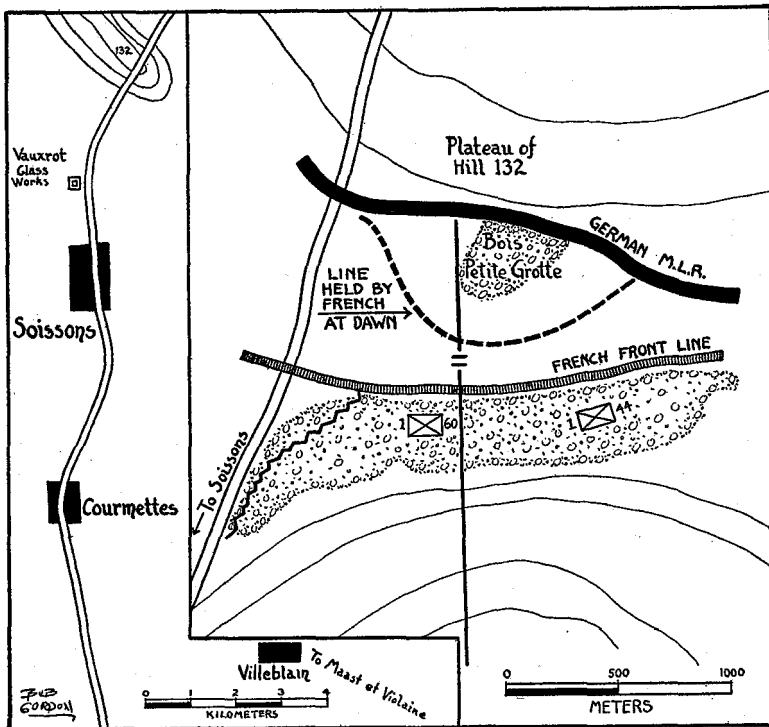
Loss of control through a vicious formation, and loss of surprise through yelling and firing had wrecked one more night attack.

EXAMPLE III

On January 12, 1915, the French were attacking northward near Soissons. At 7:00 a.m. the 1st Battalion 60th French Infantry, which was in reserve, marched from Villeblain to Maast-et-Violaine where it arrived at 10:45 a.m. There it received an order to move back to Courmelles which it reached at eight o'clock that night.

At Courmelles the battalion commander was informed that his battalion, in conjunction with a battalion of the 44th Infantry, would make a night attack, without delay, to retake Hill 132 which had just been captured by the Germans.

No large-scale maps were available, no one in the battalion knew the terrain, and there was no information as to the exact location of the hostile positions. The order received by the battalion commander more than met the requirement of brevity—"attack when you get close to Hill 132." The information he received was equally helpful: "The enemy is on Hill 132. He will shoot at you." A



Example III

guide had been provided, however, to conduct the battalion to the French front-line.

The two battalions cleared Courmettes at 8:30 p.m., and arrived at the Vauxrot Glass Factory two hours later, where they dropped packs. They now marched along the road in single file. Soon the guide turned off into a communication trench that was knee-deep in mud and blocked in several places by fallen trees. At these blocks the column was broken, companies became disorganized and considerable time had to be spent in reorganizing platoons when the front line was reached. As a result it was 3:30 a.m. before the attack formation could be taken.

The battalion was directed to form with two companies in assault and two in support, each company in column of platoons, and each platoon deployed in line of skirmishers. On forming up, company

commanders found that they had near them only squads without leaders and portions of platoons. Entire units were missing. Someone lit a match to check the compass. German flares became increasingly frequent.

At 4:00 a.m. the attack jumped off—but in places only. The troops were poorly oriented. They did not know where to go or where to stop. There was no liaison. One assault company lost direction. The company behind it pushed on and the two became hopelessly intermingled. German artillery and machine guns opened a withering fire on the disorganized units, forcing them to halt, take cover and wait for daylight.

At daybreak it was learned that the battalion of the 44th had attacked on the right of the 60th at a slightly later hour. Both battalions had failed, virtually no ground having been gained. The losses in the 60th were exceptionally heavy.

From the article in the June, 1924, *Revue D'Infanterie* by Lieutenant Colonel Jeze, French Army.

DISCUSSION

This attack is a conspicuous tragedy of error. A deliberate effort at failure could not have been more thorough.

The troops were exhausted when the attack was launched, having spent the day in marching and counter-marching.

The precipitation with which the battalion was engaged definitely precluded proper preparation, particularly reconnaissance. Indeed, the troops were in the dark figuratively as well as literally, not even knowing the exact location of the hostile position. Add to this, the additional handicaps that the battalion was not under control at the jump-off, that the formation was entirely unsuitable, that lighting matches, firing and yelling removed any chance of surprise, and we have a situation that not even a Bonaparte could retrieve.

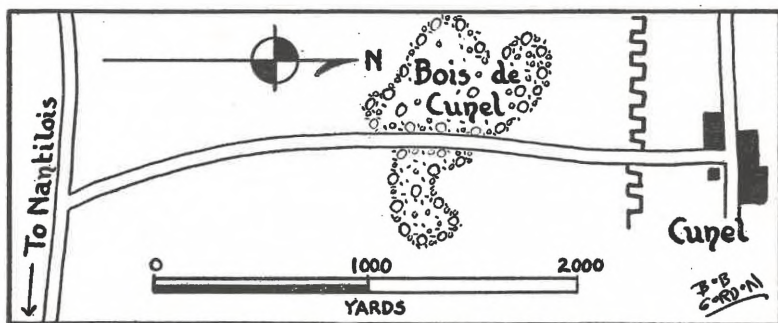
As Lieutenant Colonel Jeze concludes: "In doing exactly the opposite of what was done, they would not have been far from realizing the most favorable condition for the success of the operation."

EXAMPLE IV

On October 10, 1918, the 2d Battalion 30th U. S. Infantry was in reserve in the Bois de Cunel. On the previous day, as an assault

unit, it had reached the north edge of the wood and was therefore somewhat familiar with the terrain beyond.

Early on the 10th the 1st Battalion, 30th Infantry, had attacked to the north, but after progressing a short distance had been pinned to the ground in front of a German trench located north of the Bois de Cunel. It was ordered to withdraw to the Bois, reorganize and



Example IV

resume the attack at 7:30 p.m., assisted by a new artillery preparation. The withdrawal began shortly after dark, but in the process the battalion became so disorganized that it was unable to launch the attack at the designated hour. However, the division commander had ordered that the trench 800 yards north of the Bois de Cunel be taken on the 10th. Since the 1st Battalion had failed to accomplish this mission and was unable to make a second effort in time, the 2d Battalion, 30th Infantry, and one company of the 7th Infantry were directed to attack the hostile position at 10:00 p.m. The northwestern edge of the wood was designated as the line of departure for the 2d Battalion and the northeastern edge for the company. There was to be no artillery support.

After all units were in place the battalion commander assembled his company commanders and thoroughly explained the details of the attack. The formation was three companies in assault and one in reserve. As the frontage was large and since all organizations had been depleted some forty per cent in previous fighting, each company, in turn, employed three platoons in assault and one in reserve. The assault platoons were deployed as skirmishers with intervals of two to five yards. The reserve company, formed in

line of squad columns, was directed to follow the center assault company at 100 yards. The machine-gun company attached to the battalion was ordered to remain in place until the enemy had been driven from the trench, then to displace forward and assist in the organization of the captured position.

The attack was launched on time. Exactly two and one-half hours had elapsed since the Germans had been subjected to a heavy artillery preparation, following which the attack of the 1st Battalion had failed to materialize. When no attack had followed this 7:30 p.m. bombardment the Germans apparently concluded that there would be no further American advance that night.

The movement forward of the 2d Battalion was slow and cautious. Secrecy had been stressed. German flares went up frequently. Each time one began to illuminate an area all men remained motionless, resuming their movement only when the illumination disappeared. This method of advance was continued until the assault units were close to the hostile position. Finally the movement was discovered and machine-gun and rifle fire ripped into the assaulting units from front and flanks. But the Americans were now too close to be stopped. In a swift charge they closed with the enemy, overcame a determined resistance and captured part of the disputed trench. The Germans, however, were still holding portions of the trench on the flanks.

By this time every vestige of organization had disappeared. Many company, platoon and section leaders were casualties. The reserve company was completely intermingled with the assault companies. All was confusion. Immediate steps were taken to reorganize the battalion, while a message requesting reinforcements was sent to the regimental commander.

At 2:30 a.m. the battalion commander reported to the regimental C.P. There he informed the colonel that the 2d Battalion was now occupying the trench in the zone of the 30th Infantry and had established contact with the company from the 7th Infantry on the right, but that reinforcements were necessary on the left where the enemy still held the trench in considerable force. One company was promptly dispatched to this dangerous flank where, after severe fighting, it succeeded in driving the enemy from his position.

At 6:00 a.m. the strength report of the troops that had made this

attack showed the following effectives: Company E—1 officer, 30 men; Company F—40 men; Company G—1 officer, 20 men; Company H—1 officer, 27 men; Company G, 7th Infantry—1 officer, 10 men. Not all of the missing were casualties. Many men who could not be accounted for had merely become lost in the darkness.

From the personal experience monograph of Major Turner M. Chambliss, Infantry.

DISCUSSION

Here most of the conditions essential to the success of a night operation are evident.

The battalion knew the terrain.

It was close to its clearly-defined line of departure.

It was placed opposite its objective.

The objective was limited and was unmistakable even in the dark.

The troops had not been engaged during the day and were therefore comparatively fresh.

Details of the attack were carefully explained by the battalion commander.

The movement was made in silence, great care being taken to avoid alarming the enemy.

The attack was made at a time when the Germans had concluded that no further effort would be made that night.

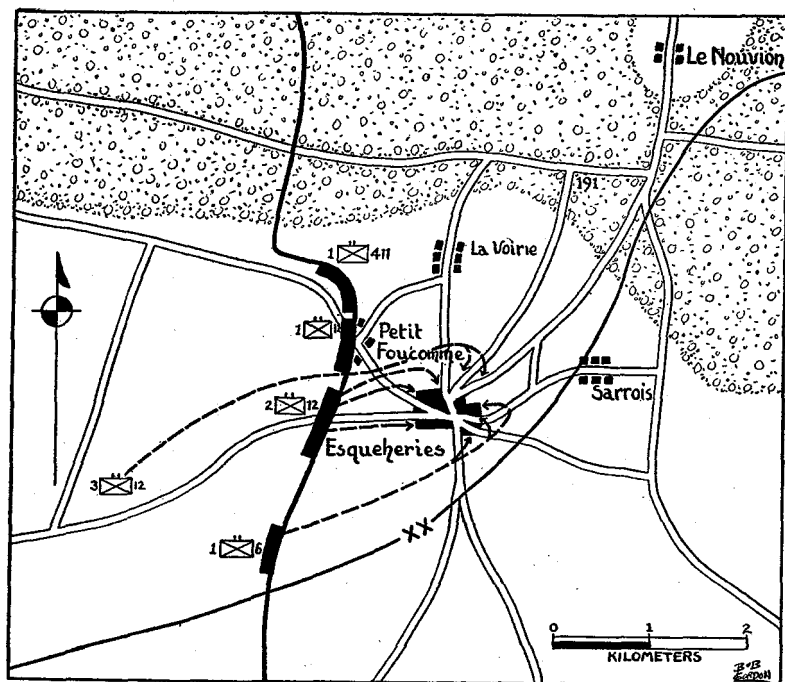
All of these factors made for success.

On the other hand the extended formation contributed to the loss of control, and the subsequent confusion and intermingling of the reserve company with the assault units necessitated a call for help to clear up the situation on the left flank.

The figures giving the effective strength of units are indications of the disorder which may attend even a successful night attack. True, the companies were depleted at the start but, even so, the small effective strength at the conclusion of the operation is striking.

EXAMPLE V

On November 5, 1918, the 123d French Division was attacking to the east. Late in the afternoon it had been stopped west of Esqueheries. The troops were almost exhausted, but despite this the 12th Infantry with the 1st Battalion, 6th Infantry attached,



Example V

was directed to prepare an attack to take Esquehéries without delay.

The colonel of the 12th Infantry issued orders for an attack at dark. The 2d Battalion 12th Infantry was directed to attack the town from the west, encircle it on the north and seize the exits toward Petit Foucommes and La Voirie. The 3d Battalion 12th Infantry was ordered to pass north of the 2d Battalion and hold the exits leading toward 191 and Le Nouvion. The 1st Battalion 12th Infantry was told to push forward to the Le Nouvion Road and occupy a position where this road entered the forest. The 1st Battalion 6th Infantry was directed to seize the southern exits of Esquehéries and those leading toward Sarrois. After securing these exits the attacking battalions were then to strike toward the center of the town.

The commander of the 1st Battalion 12th Infantry received this order at 8:00 p.m. and immediately sent for his company com-

manders. At 9:00 p.m. none of them had yet reached the battalion C.P. In the interim the battalion commander learned that the 1st Battalion, 411th Infantry, on his left, had received no order to attack. The night was pitch dark and rain was falling in torrents. There was no road or trail which could guide him to his objective; he would have to advance three kilometers across country over terrain that bristled with thick hedges. Considering his men incapable of such an effort, he requested authority to remain in position until daybreak. This was granted.

The 2d Battalion, 12th Infantry also received this order about 8:00 p.m. Its commander at once endeavored to get in touch with adjacent battalions to arrange details. He was finally informed that the 1st Battalion had received authority to delay its advance until daylight. He was unable to get in touch with any other unit.

Undeterred by this, the battalion commander issued his order. The 5th Company was directed to move forward until it reached the Petit Foucommes-Esqueheries Road, which it would follow to the town. The 6th Company was ordered to advance until it reached the dirt road leading from Voirie to Esqueheries, then follow that road to the town. The 7th Company, which had been in reserve, was directed to send one platoon to attack the road entering Esqueheries from the west and capture the western part of the town. The rest of the 7th Company was directed to remain in reserve.

The company commanders protested that their men were extremely fatigued, the rain torrential, the night dark, and the terrain unknown. The battalion commander was obdurate. He stated that the operation would be carried out according to his order and that the movement would start as soon as the 3d Battalion 12th Infantry arrived.

At 11:00 p.m. the 10th Company of the 3d Battalion arrived abreast of the 2d Battalion. Its commander stated that at the start of the movement the 10th had been the rear company in the 3d Battalion column but that now he had no idea where the remainder of the battalion was. After a further fruitless delay the commander of the 2d Battalion directed his companies to move to the attack without waiting for the 3d Battalion.

Shortly after the attack jumped off the remaining units of the

3d Battalion arrived. The men were exhausted, the companies disorganized and the officers unoriented. The battalion commander thereupon decided to remain in position until dawn.

Meanwhile the 2d Battalion had moved out at 1:00 a.m., much later than had been expected. Darkness and the heavy rain made the forward movement slow and difficult. The 5th and 6th Companies did not reach the north edge of the town until daylight. Similarly the 1st Battalion 6th Infantry did not reach the southern exits until 5:00 a.m. However, the one platoon of the 7th Company ordered to attack Esqueheries from the west, and which had a road to guide on, progressed rapidly. It captured the western part of Esqueheries, whereupon the Germans evacuated the entire town, leaving this one platoon in undisputed possession.

From the article in the *Revue D'Infanterie*, April, 1918, by Major Janet, French Army, on the advance of the 123d French Division from the Sambre Canal to the vicinity of Chimay.

DISCUSSION

The failure of the attempted encirclement of Esqueheries is instructive. Four battalions were ordered to participate in the operation. So great were the difficulties that two did not even make a start, while the other two, with the exception of one platoon, did not arrive within striking distance of the objective until daylight.

This one platoon had a positive means by which it was enabled to maintain direction, namely, the road that ran past its initial position straight into the town. Other units, lacking points on their route which could be readily identified, spent the greater part of the night in a disheartening game of Blind Mans Bluff.

Again it is pointed out that of four battalions ordered to the attack but one platoon closed with the enemy and yet this single platoon was entirely successful in capturing the objective.

This operation graphically demonstrates the following facts: troops who are to take part in a night attack should be familiar with the terrain; the ground should not present too many obstacles to movement; the troops should be close to and opposite their objective; the axis of advance should be clearly marked and unmistakable; and finally, the troops involved should be in good physical condition and imbued with a high morale.

EXAMPLE VI

On November 11, 1914, the 121st French Infantry was entrucked and moved to the north where a great battle was in progress along the Yser River.

In three months of war the 121st had been both lucky and successful. Morale was excellent. As an added touch, many officers and noncommissioned officers, wounded in earlier fights, had recently returned to the regiment.

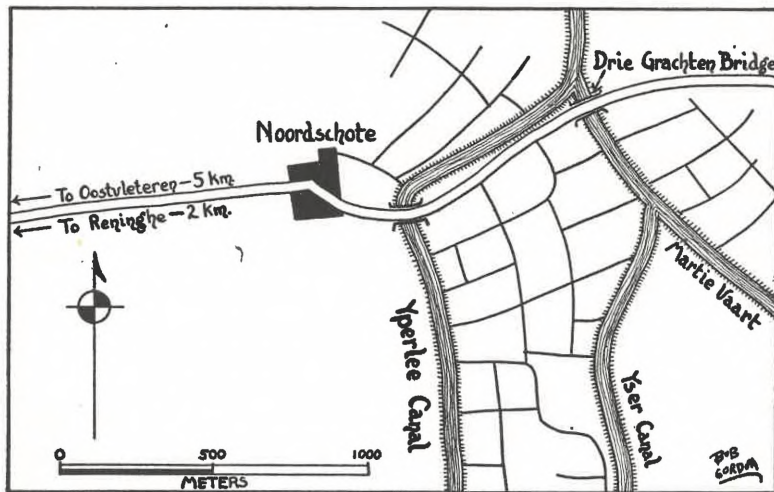
About noon the 121st arrived at Oostvleteren. Here it was directed to march to Reninghe where further orders would be issued.

At Reninghe at 4:00 p.m. a division commander informed the colonel:

"Your regiment is attached to my division. The Germans have crossed the Yser Canal between the Drie Grachten bridge and a point 800 meters south of it. There is nothing in front of Noordschote to prevent their rapid progress toward Reninghe.

"At 1:00 a.m. tonight the 121st will attack and drive the enemy over the Yser.

"The XX Corps will be on your right and a regiment of Zouaves on your left. There is a gap between them. Their flanks are near the canal.



Example VI

"You will find the Colonel of Zouaves at Noordschote.

"Carry on without further orders."

The regimental commander designated the 2d Battalion, supported by a machine-gun platoon, to make the attack.

Noting from his map that the terrain between the Yser and Yperlee Canals appeared extremely difficult, the battalion commander determined to make a personal reconnaissance. Saddle horses having just arrived he mounted all his company commanders and moved rapidly toward Noordschote. Finding no one there the party climbed to the second story of a house and studied the terrain. Although dusk was closing in, sufficient light remained to show that the problem of reaching the Yser with troops at night would present grave difficulties. The intervening terrain was a quagmire, interlaced with small canals and large ditches, which would obviously make the maintenance of direction and control extremely difficult. No French units could be seen. Apparently there were some Germans near the Yser Canal.

Following the reconnaissance, the battalion commander issued an oral order for the attack. He directed the battalion to move forward without delay to Noordschote and to form by 11:30 p.m. along the Yperlee Canal with three companies abreast, their right 400 meters south of the Noordschote Bridge, and their left just north of the Yperlee bend. Patrols would be sent out to seek liaison with units on the flanks. Reconnaissance of the canals directly to the front was limited to 200 yards in order not to alarm the enemy. Two companies were directed to search Noordschote for light material such as ladders and planks which could help them across canals.

At 12:15 a.m. the 8th Company would move out along the ditch 400 meters southeast of and parallel to the Noordschote-Drie Grachten Road and follow this ditch to the Yser.

The 6th Company, starting at 12:30 a.m., would at first follow the ditch just south of the road then incline to the right and march on the junction of the Yser and the Martie Vaart.

The 5th Company, at 12:40 a.m., would follow the road or the ditch just north of the road and attack the Drie Grachten bridge.

The 7th Company and the machine guns were to remain east of Noordschote in reserve.

The battalion commander further directed that there be no firing, that leading elements wear a white brassard, and that particular attention be paid to control, each company moving in a single column, preceded by an officer's patrol.

About 6:30 p.m. the battalion started its march on Noordschote. In the meantime the battalion commander had reported the results of his reconnaissance and his plan for the attack to the regimental commander, who approved his dispositions but informed him that he was going to try to have the attack postponed 24 hours.

At 8:00 p.m. the battalion commander met the colonel of the Zouave regiment at Noordschote, which still appeared entirely deserted. The Zouave commander stated that he knew reinforcements were coming but not that a night attack was contemplated. He added that he could not furnish any guides who knew the terrain in question. There were no evidences of the XX Corps to the south.

The battalion reached Noordschote at 8:30 p.m. Efforts to find the commander of the front-line battalion of Zouaves on the left failed. However, the few Zouaves in the vicinity were notified of the proposed action of the 121st and told not to fire. Likewise a few tired soldiers of another unit were found just north of Noordschote-Drie Grachten road, and their commander, a noncommissioned officer, was informed of the plan to attack. To questioning he replied that he knew nothing of the terrain south of the road but believed that the water in the ditches would be about a meter deep. At 11:00 p.m. patrols reported that water in these ditches was breast high.

Just at this time an order was received countermanding the attack and directing the battalion merely to hold its ground. All companies were immediately notified.

At 11:10 a.m. a patrol reported that it had gained contact with the XX Corps to the south and found it in a state of complete confusion; no one there knew the location of even the larger elements.

At 12:30 a.m. came a new counter-order directing the attack to be launched at 3:00 a.m. The battalion maintained all its previous arrangements with the exception of the times at which companies were to move.

The 8th Company moved forward at 2:15 a.m. At 2:30 a.m. the

captain of this company reported that it was almost impossible to cross the canals. Several men had fallen in and were unable to climb out of the sticky mud. He added that under such conditions move-to the Yser would require several hours, that many men would be lost en route and that there would be no surprise. Having implicit confidence in this company commander and feeling that he would not exaggerate difficulties, the battalion commander immediately ordered:

"The 8th Company will follow the 6th and on reaching the Yser, move south to its objective."

The 6th Company moved out on the Noordschote-Drie Grachten Road and followed it almost to the Yser before turning south. A few minutes later the 8th Company followed the 6th. The 5th Company then moved by the same route to the Drie Grachten Bridge.

The attacks of all three companies succeeded.

The Germans, completely surprised, were thrown back over the Yser without more than a shot or two being fired. The battalion captured 25 prisoners and suffered no losses.

From the article by Lieutenant Colonel Baranger, French Army, in the *Revue D'Infanterie*, April, 1929.

DISCUSSION

This attack succeeded despite conditions which might easily have led to failure, such as fatigue of the troops, the almost impassable state of the ground, vagueness as to situation of adjacent units, and the fact that the troops arrived on the scene after dark.

Why did it succeed? **DIRECTION! CONTROL! SURPRISE!**

The column formation in which the advance was made facilitated control. Each company was preceded by an officer's patrol, thus, when contact was first made, it was made by a group under a responsible leader.

The road and the Yser guided the troops to their destination. In the original order these companies were to advance abreast, each in a column and each following a specified ditch. When this was found to be impracticable, all used the road.

Extreme precautions were taken to obtain surprise. Despite the obvious desirability of ascertaining the state of the terrain, the bat-

talion commander limited reconnaissance to 200 yards to the front in order to avoid alarming the enemy. In the advance he insisted on silence and prohibited firing.

Finally, the battalion consisted of good troops and determined leaders, and as a result of success in three months of war, a feeling of mutual trust and confidence had been established.

"The symphony in black was not known to this battalion," says Colonel Baranger.

CONCLUSION

Experience in the past has lead to certain conclusions in regard to the undertaking and preparation of night attacks. Among many such conclusions are the following:

1. Night attacks should be undertaken preferably by troops that are fresh, well-trained, in good physical condition and who are under excellent control at the start.

2. The objective should be clearly defined and easily recognized in the dark, or already known to the attacking troops.

3. The units making the attack should be able to form facing the objective and at no great distance from it.

4. Generally speaking, there can be no maneuver. Each attacking column must drive through to its objective without regard to the progress of adjacent units. (This does not preclude maneuver by very small groups, involving distances of only a few yards.)

5. Simplicity in night attacks is vital in order to maintain direction and control. Routes of approach should be clearly defined and unmistakable in the dark. Trails, railroads, edges of woods, ridges, valleys or other prominent features leading toward the objective which can be readily located and followed by the troops are most desirable.

6. Subordinate leaders should be afforded an opportunity for daylight reconnaissance.

7. Detailed preparation is usually necessary if the attack is to succeed.

For the troops who are to carry out the attack the following points are important:

1. The formation must facilitate the maintenance of direction and control. This means a column formation in the early stages,

and, as the enemy is approached, a line of small columns preceded by patrols, in preference to a line of skirmishers.

2. A strong leader with some determined men should be at the head of each column. A reliable character should be placed at the rear. Thus emergencies can be handled silently and decisively.

3. Instructions must be explicit. All men should know the objective, the compass direction of attack, the formation to be assumed at position of deployment, the exact mission of the unit, the signal for the final rush to the assault, action in case the enemy is not surprised, locations of rallying points in the event the attack is definitely checked, action upon capturing the hostile position, and the means of identifying friendly troops.

4. Secrecy and silence are essential. There must be no firing, no yelling, no smoking, no striking of matches. Absolute silence must be maintained until the troops are among the enemy.

Night attacks are highly difficult operations. They are frequently the expression of a vigorous leadership, which, regardless of difficulties, is determined to carry through to a successful conclusion. But despite the vigor of leadership, these attacks will usually fail unless extreme attention be accorded that military trinity of the night—*direction, control, and surprise*.

THE END.

INDEX

Index of Persons

Allehart, Col., 389.
Allen, Col. R. H., 49, 51, 52.
Alexander, Maj. Gen. Robert, 39.

Baick, Lt. Gen., 205.
Baldwin, Gen., 259, 260, 261.
Baranger, Col., 378, 379.
Beatty, Capt. George S., 22.
Bertin, Capt., 86, 87, 88.
Biard, Lt., 330, 331, 332.
Blucher, 121.
Boetticher, Ensign, 104, 105, 106.
Bouchacourt, Maj., 329.
Boyd, Maj. Leonard R., 191, 304.
Brouste, Lt., 330, 331.
Brusilov, Gen., 186.
Bulger, Capt. John W., 297.
Burrass, Maj. Withers A., 248, 296.
Butler, Capt. George E., 125.
Butts, Col. Edmund L., 8.

Carroll, Major, 273.
Chambliss, Capt. Turner M., 18, 141, 254, 371.
Champerty, Capt. A. S., 52.
Chastaine, Maj. Ben Hur, 133.
Clark, Capt. Solomon F., 340.
Cobby, Lt. Luther W., 153, 154.
Collier, Capt. Wm. A., 242.
Cordonnier, Gen., 47, 199, 351, 352.
Cox, Gen., 121.

Dabney, Lt., 23.
du Theil, Maj. de la Porte, 345, 347.
de Montluc, 285.
Detrow, Pvt. Walter, 88, 89.
Dillon, Lt., 23.
Dollarhide, Maj. Erskine S., 150.
Ducornez, Lt. Col., 294.
During, Capt. Fred, 22.
Dusenberry, Maj. Ralph W., 53.
Dyer, Maj. C. W., 103.

Eddy, Maj. S. S., 86, 87, 75.
Equios, Capt., 330, 331, 332.
Etienne, Col., 204, 362.

Foch, Marshal Ferdinand, 107, 108.
Frasier, Maj. Lyman S., 180, 181, 354.
Freeborn, Capt. Ottman W., 175.
Fremi, Lt. Wesley Jr., 23.
Fuller, Capt. H. E., 220.
Fuller, Gen. J. F. O., 170.
Funkhouser, Lt. Paul T., 153.

Gale, Capt. Carroll M., 162.
Gay, Lt. James H., 9, 10.
Gersbach, Sgt., 90, 91.
Glodecks, Sgt., 85.
Goldau, Lt., 231.
Grassett, Col., 88, 95, 120, 188, 214.
Hagerty, Capt. Roy N., 149.
Hamilton, Gen., 261.
Hesse, Lt. Kurt, 53.

Hilldring, Capt. John H., 257, 258.
Hilton, Capt. Roy C., 48.
Holderman, Capt. Nelson M., 118.
Hoolmann, Lt., 231.
Huebner, Maj. Clarence R., 252.

Janet, Maj. P., 29, 76, 326, 332, 374.
Jeze, Lt. Col., 365, 368.

Koeltz, Lt. Col., 143, 148, 195, 198, 216.
Knapp, Capt. Raymond, 131.

Laffargue, Commandant A., 159, 177.
Legge, Maj. Barnwell R., 233, 235.
Lewis, Maj. E. E., 13.
Liddel Hart, Capt. B. H., 1, 318, 329.
Litzmann, Gen., 30.
Livesay, Maj. Wm. G., 69.
Logan, Maj. Fred M., 165.

MacDonald, Maj. Stuart C., 303, 310.
McAllister, Capt., 7.
Mendenhall, Maj. John R., 152, 153.
Merrill, Capt. Howard N., 211, 270.
Meyer, Capt., 231.
Michel, Capt., 193.
Monoury, Gen., 144.

Olmstead, Capt. Merritt E., 110.

Pamponneau, Maj., 172.
Percin, Gen., 342.
Petain, Gen., 151, 255.
Pots, Capt., 100.
Pugens, Maj., 120, 185.

Rich, Capt. Francis M., 245, 301, 319.
Ridgley, Lt., 23.
Roosevelt, Maj. Theodore Jr., 25.
Rose, Capt. Frederick W., 244.
Ryan, Lt. Wm. C., 57.
Ryder, Maj. Chas. W., 276.

St. Julien, Maj., 238.
Scharnhorst, 121.
Screws, Col. Wm. P., 273.
Short, Col. Walter C., 315.
Signorino, Maj., 213.
Smith, Capt. Walter B., 55.
Stark, Maj. Alexander N., 46.

Tillman, Lt., 23.
Touchon, Col., 71, 130, 227, 285.
Tydings, Maj. Millard E., 77, 79.

Upton, Gen. L. S., 77, 81.

von Francois, Gen., 65.
von Gronau, 144.
von Hindenberg, Gen. Paul, 122.
von Kluck, Gen., 196.
von Linsinger, 196, 197.
von Moltke, Gen., 131.

INDEX OF PERSONS

von Schack, Maj. Gen., 148.
 von Schell, Capt. Adolph, 3, 124, 125,
 136, 140, 185, 187.
 von Stamford, Gen., 198.
 Walker, Maj. Fred L., 6, 98.

Whittlesey, Maj. Chas. W., 114, 117.
 Wood, Capt. Jared, 89, 211, 299.
 Woodfill, Sgt., 84.
 York, Sgt., 84, 91.
 Young, Lt. R. W., 45, 46.

Index of Organizations

British

A. N. Z. Army Corps, 258, 259, 260,
 261, 333, 334.

1st Division, 321.
 15th Division, 262, 263, 264, 322.
 21st Division, 263.
 24th Division, 263.
 47th Division, 262, 264.

1st Brigade, 321.
 2d Brigade, 321, 323, 324.
 3d Brigade, 321, 323.
 44th Brigade, 263.
 63d Brigade, 263.
 96th Brigade, 355.

2d Welch Bn., 321, 322, 323, 324, 333.
 7th K. O. S. B., 262.
 8th Seaforth Highlanders, 261.
 9th Black Watch, 261, 262.
 10th Scottish Rifles, 261.
 Green's Force, 321, 322, 323.

French

2d Army, 343.
 4th Army, 337, 348.
 5th Army, 99.
 6th Army, 144, 196.
 2d Colonial Corps, 14, 119, 349, 350,
 351, 352.
 12th Corps, 120.
 20th Corps, 375, 377.

3d Colonial Division, 81, 120, 201.
 7th Division, 86, 88, 118, 119, 187,
 188, 201, 212.
 8th Division, 14, 118, 119.
 15th Division, 28.
 19th Division, 100.
 29th Division, 347.
 37th Division, 327.
 40th Division, 201, 203, 204.
 42d Division, 48, 326, 327, 329.
 59th Division, 348.
 62d Division, 220.
 66th Division, 27, 28.
 128th Division, 27, 28, 29, 326, 371,
 374.
 153d Division, 171.

5th Colonial Brigade, 14, 93, 120.
 13th Brigade, 86, 87.
 14th Brigade, 86.
 79th Brigade, 201, 204.
 80th Brigade, 201.
 87th Brigade, 199, 348, 350, 351, 352.
 138th Brigade, 363.
 211th Brigade, 128.
 254th Brigade, 291.

Chasseurs, 69, 70, 225, 293, 327, 328,
 348, 349, 363, 364.
 Moroccan Brigade, 143, 144.
 Zouaves, 171, 172, 375, 376, 377.
 6th Inf., 28, 29, 75, 76, 77, 371, 372,
 374.
 12th Inf., 27, 29, 324, 329, 330, 332,
 371, 372, 373.
 14th Inf., 337.
 40th F. A., 202.
 49th F. A., 343, 346.
 70th Inf., 99.
 83d Inf., 337.
 94th Inf., 327, 333.
 103d Inf., 187.
 116th Inf., 184.
 120th Inf., 341.
 121st Inf., 375, 377.
 152d Inf., 69, 75.
 153d Inf., 158, 176.
 154th Inf., 202, 203, 204.
 155th Inf., 202, 203, 204.
 165th Inf., 346, 347.
 171st Inf., 293.
 220th F. A., 346.
 251st Inf., 363.
 254th Inf., 363, 364.
 277th Inf., 343.
 325th Inf., 345.
 336th Inf., 128.
 355th Inf., 293.
 365th Inf., 170, 286, 288.
 411th Inf., 27, 28, 29, 75, 76, 77, 373.
 412th Inf., 282.

German

1st Army, 139, 140, 143, 196.
 2d Army, 137, 139, 140.
 5th Army, 359, 362.
 1st Corps, 63.
 2d Corps, 196.
 4th Reserve Corps, 142, 193, 194, 196,
 197, 198.
 7th Corps, 139.
 13th Corps, 360, 361.
 18th Corps, 14, 96, 120.
 Guard Corps, 14, 214.

1st Division, 63, 64.
 3d Division, 30, 127, 196, 197.
 7th Reserve Division, 142, 144, 193,
 194.
 10th Division, 86, 87, 88.
 13th Division, 139.
 14th Division, 1, 137, 139, 140.
 22d Reserve Division, 142, 144, 193.
 33d Division, 204, 205.
 34th Division, 203, 204, 259.
 49th Division, 311, 313.
 50th Reserve Division, 127.

INDEX OF ORGANIZATIONS

77th Reserve Division, 122.

8d Artillery Brigade, 196.
4th Infantry Brigade, 63.
5th Guard Brigade, 127, 198.
6th Guard Brigade, 127.
53d Wurtemberg Brigade, 255.
68th Brigade, 203, 204.
86th Brigade, 203, 204.

2d Artillery, 198.
2nd Guard Regiment, 146, 147, 216.
3d Dragoons, 196, 198, 199.
4th Guard Regiment, 214, 216.
6th Grenadiers, 228, 232, 233.
7th Artillery, 194, 195.
10th Reserve Regiment, 105.
14th Uhlans, 203.
16th Infantry, 8.
22d Infantry, 104.
27th Reserve Regiment, 194, 195.
30th Infantry, 203, 359, 360, 361.
33d Infantry, 65.
35th Fusiliers, 61, 62.
37th Infantry, 361.
38th Artillery, 198.
44th Infantry, 366, 368.
45th Infantry, 64, 65.
47th Infantry, 73, 74, 228, 232.
51st Reserve Regiment, 85.
53d Infantry, 2, 8.
57th Infantry, 1, 3, 137, 140.
60th Infantry, 366, 368.
67th Infantry, 203.
69th F. A., 203.
70th F. A., 203.
82d Reserve Regiment, 142, 144.
83d Reserve Regiment, 142.
109th Infantry, 89, 90, 91.
110th Infantry, 89, 90.
121st Wurtemberg Regt., 71.
123d Wurtemberg Regt., 71.
124th Wurtemberg Regt., 71.
145th Infantry, 203.
155th Infantry, 361.
157th Regt., 322.
173d Infantry, 203, 360, 361.
180th Infantry, 356.
225th Infantry, 311, 312, 313.
228th Infantry, 311, 312, 313, 314.
229th Infantry, 223.
231st Infantry, 311, 312, 313.
256th Infantry, 122, 124, 133.
398th Infantry, 73, 231, 232.

United States

1st Division, 26, 65, 67, 68, 69, 125, 173, 181, 233, 274, 315, 340, 355.
2d Division, 40, 49, 52, 67, 247, 316.
3d Division, 13, 19, 22, 45, 58, 62, 73, 111, 112, 113, 141, 142, 228, 252.
4th Division, 34, 297.
5th Division, 316.
26th Division, 77, 271, 272.
28th Division, 150, 306, 308, 309, 310.
29th Division, 77.
30th Division, 101.
32d Division, 58.
33d Division, 279, 280.
35th Division, 131, 233.
36th Division, 132.

42d Division, 34, 207, 273, 316.
77th Division, 37, 88, 39, 114, 116, 117.

79th Division, 142.
80th Division, 21, 65, 67.
82d Division, 37, 38, 39.
89th Division, 49.
90th Division, 315.
91st Division, 243, 244.
92d Division, 143, 149.

3d Brigade, 40, 247.
4th Brigade, 40.
5th Brigade, 18.
6th Brigade, 254.
7th Brigade, 36, 75, 201.
58th Brigade, 78.
66th Brigade, 279, 281.
71st Brigade, 132.
183d Brigade, 149.

4th Infantry, 13, 19, 20, 21, 22, 112.
5th Marines, 40, 131.
6th Engineers, 112.
7th F. A., 178, 339.
7th Infantry, 13, 19, 20, 22, 112, 113, 257, 258, 370, 371.
8th Infantry, 257.
9th Infantry, 40, 41, 42, 43, 247, 248.
16th Infantry, 163, 188, 274, 276, 302, 304.
23d Infantry, 40, 41, 42, 247, 294, 295.
26th Infantry, 23, 25, 68, 178, 180, 233, 251, 252, 340, 353.
28th Infantry, 65, 68, 69, 125, 178, 250, 251, 252, 340.
30th Infantry, 4, 5, 6, 8, 9, 10, 16, 55, 57, 96, 97, 98, 254, 363, 369, 370.
38th Infantry, 4, 58, 112, 245, 257, 299, 301, 319, 320.
39th Infantry, 34, 35, 36, 52, 55, 75, 233.
47th Infantry, 38, 207, 210, 211, 219, 220, 237, 242, 267, 269, 297.
59th Infantry, 220, 222.
61st Infantry, 43, 44, 103, 110.
101st Infantry, 77, 78, 79.
104th Infantry, 11, 12, 13.
111th Infantry, 173.
112th Infantry, 173.
113th Infantry, 77, 78, 79, 80.
115th Infantry, 78.
116th Infantry, 78, 79.
117th Infantry, 101, 102.
127th Infantry, 58.
131st Infantry, 160, 161, 162, 279.
132d Infantry, 279, 280.
138th Infantry, 131.
140th Infantry, 131.
142d Infantry, 132, 133.
167th Infantry, 203, 209, 210, 271, 272, 273.
168th Infantry, 210, 267, 269, 271, 272, 273.
305th Infantry, 149, 150.
306th Infantry, 39.
307th Infantry, 114, 118.
308th Infantry, 114.
314th Engineers, 51.
364th Infantry, 243, 244.
365th Infantry, 49.

INDEX OF ORGANIZATIONS

- 3d Machine-Gun Battalion, 178.
 7th Machine-Gun Battalion, 62, 151.
 8th Machine-Gun Battalion, 19, 20.
 11th Machine-Gun Battalion, 54.
 107th Machine-Gun Battalion, 307, 308, 309, 310.
 108th Machine-Gun Battalion, 307.
 109th Machine-Gun Battalion, 307, 308, 310.
 111th Machine-Gun Battalion, 80.
 305th Machine-Gun Battalion, 149, 150.
 306th Machine-Gun Battalion, 114.

Geographical Index

- Aincreville, 43, 44, 45.
 Aire River, 37, 38, 39, 308.
 Aisne-Marne, 13, 52, 170, 188, 247, 271, 297 339.
 Aisne River, 62, 220.
 Alaincourt, 282, 283.
 Amblaincourt, 360, 361, 362.
 Andon Stream, 43, 44.
 Andrea Ravine, 327, 328.
 Anglecourt, 360, 361.
 Anloy, 337, 338.
 Ansoinville, 53.
 Arcis, 62.
 Ardennes Forest, 93, 94.
 Ardennes Mts., 118.
 Argonne Forest, 114, 233, 307.
 Arsimont, 99.
 Artaise, 66, 69.
 Artois, 151.
 Artonges, 138, 139.
 Aumetz, 202, 203.
 Autreville, 50, 51.
 Auvelais, 99, 100.
 Bantheville, 245, 246.
 Barcy, 197, 198.
 Bayonville, 40, 41.
 Bazoches, 219, 221, 238, 239.
 Beauclair, 348.
 Beaufort, 348.
 Beaumont, 41, 66, 67, 68, 349, 350.
 Bedon, 126, 127.
 Belleau, 11, 12.
 Belleau Wood, 11, 12, 131.
 Belmont, 42, 212, 213.
 Belval, 41, 42.
 Berthenicourt, 283, 284, 285.
 Bernoville, 325.
 Berzy le Sec, 340.
 Bethincourt, 161.
 Beauvillers, 202, 203.
 Blanc Mont, 133.
 Blanzee, 128, 129.
 Bleid, 86, 87.
 Bois D'Aigremont, 4, 5, 6, 7, 56.
 Bois de Baulny, 58, 59.
 Bois de Belval, 41, 42, 43.
 Bois de Beuge, 18, 19, 20, 254.
 Bois de Cantigny, 24.
 Bois de Chene Sec, 58, 59.
 Bois de Clerembauts, 294, 295.
 Bois de Cunel, 16, 17, 253, 368, 369.
 Bois de Dole, 237, 238, 239.
 Bois de Fontaine, 23, 24, 26.
 Bois de Foret, 44.
 Bois de Forges, 279, 280, 281.
 Bois de Hache, 49, 50.
 Bois de Hesse, 141.
 Bois de la Morine, 58, 59.
 Bois de Latilly, 226, 277.
 Bois de Loges, 212, 213.
 Bois de Moncy, 353, 354.
 Bois de Moreuil, 327, 328.
 Bois de Pultiere, 44, 108, 109, 110, 113.
 Bois de Rappes, 44, 108, 109, 110, 112.
 Bois de Soiry, 49, 50.
 Bois de St. Leger, 86, 87.
 Bois D'Ospot, 94, 95.
 Boisson de Cresnes, 53, 54, 55.
 Bois de Tillieres, 194, 195.
 Bois Hugo, 263.
 Bois Manuet, 225, 226, 227.
 Bouchoir, 363.
 Bouresches, 12.
 Bourguilles, 307, 308.
 Broville, 128, 129.
 Buzancy, 65.
 Broussy le Petit, 3.
 Bulainville, 359, 360.
 Bunet Stream, 360, 361.
 Busigny, 101, 102, 103.
 Butte de Souain, 292, 293.
 Byzeziny, 30, 31, 32.
 Cambrai, 89.
 Cantigny, 23, 125, 126, 341.
 Caucraumont, 76.
 Cecille Ravine, 327, 328.
 Cecille Wood, 327, 328.
 Cervisy, 348, 349.
 Cesse, 199, 200, 348, 349, 350, 351.
 Chambry, 197, 198.
 Champaubert, 138, 139.
 Chanel Wood, 360, 361, 362.
 Chanuk Bair, 258, 259, 261.
 Chapelle St. Croix, 71.
 Charteves, 5.
 Chateau-Gaillard, 142, 143.
 Chateau Thierry, 63, 138, 152, 247.
 Chaudun Farm, 190.
 Chehery, 66, 68.
 Chemin des Dames, 48.
 Chene Tendu, 309, 310.
 Chery Chartreuse, 35, 36.
 Chevenges, 66, 68.
 Cierges, 18, 19, 20, 21, 22, 245, 246, 253.
 Cite St. Auguste, 262, 263.
 Clairs Chenes Woods, 44, 111, 112.
 Coizard, 2.
 Conde-en-Brie, 62, 63.
 Courmelles, 366, 367.
 Courpoil, 272, 273.
 Crusnes River, 202, 203, 204.
 Crezancy, 4, 5, 6, 7, 8, 10, 96, 97.
 Ctesiphon, 15.
 Cuisy, 194, 195, 286, 287, 288.
 Cunel, 16, 17, 19, 20, 21, 44.
 Cutry 251.

GEOGRAPHICAL INDEX

Dardenelles, 333.
Destry, 176, 177.
Drie Grachten Bridge, 375, 376, 377,
378.
Drillancourt, 161.

Ecorcherie, 202.
Errouville, 202, 203.
Esquecherie, 371, 372, 373, 374.
Ethe, 86, 87, 88, 118, 120, 187, 201,
212, 213.
Etrayes Ridge, 77, 78.
Etreux 75, 76.
Exermont, 234.
Eudikuhnen, 123, 124.
Eyne, 243, 244.

Faverolles, 53, 54.
Fecht River, 69, 70, 71.
Fere-en-Tardenois, 89.
Ferme D'Arietel, 178, 179.
Fescheux Farm, 194, 195.
Fillieres, 202, 204.
Fils de Fer, 307, 308.
Fismes, 173, 174.
Fismettes, 173, 174, 175.
Fontenelle, 133.
Foret de Dieulet, 348, 349, 350.
Foret de Fere, 207, 208, 209.
Foret de Jaulny, 50, 51, 348, 349.
Forges, 84, 85, 281.
Forges Brook, 84, 85, 161.
Fort Kezel, 243, 244.
Fosse, 40, 41, 42.
Fosse aux Demoiselles, 53.
Fossey, 4, 5, 7, 8, 55, 74, 96, 97.
Frauenackerkopf, 70.
Franquets Farm, 257.
Frenois, 66, 68.
Fromentieres, 138, 139, 140.

Galkow, 30, 31.
Galkowek, 31, 32.
Gallipoli, 258.
Gercourt, 160, 161, 279, 280.
Gesnes, 59.
Gesvres-le-Chapitre, 194.
Gette, 61.
Givry, 12.
Gland, 229, 232.
Gobineaux Ravine, 347.
Gonnelleu, 89, 90.
Goritten, 64, 65.
Gospodarz, 311, 312.
Grand Thiolet, 330, 331.
Gretchen Ravine, 327, 328.
Grougis, 27, 28, 29, 325, 331.
Guise, 14, 255.
Gumbinnen, 123.

Hancourt, 104, 105.
Hautecourt, 128.
Herbennerie Wood, 229, 231.
Heurne, 243, 244.
Heurtebise Farm, 199, 200.
Hohroth, 70.
Hulluch, 262, 264, 322.

Issoncourt, 360.
Ivorny, 142, 143.

Jehonville, 337, 338, 339.
Jeune Bois, 86, 87, 212, 213, 214.
Joches, 1, 3.
Joppecourt, 202, 203.

Karpin, 126, 127.

La Bagnelle, 66, 68.
La Forge Farm, 41, 42, 66, 67.
La Croix Rouge Farm, 272, 273.
Laffaux, 346.
La Haute Maison, 219, 221.
La Malacorre, 128, 129.
La Neuville Comte Farm, 353, 354.
La Neuville-les-Dorengt, 75, 76.
La Tuilerie Farm, 41, 43.
Laval, 287, 288.
La Voirie, 372, 373.
Le Cateau, 61.
Le Chanet, 5.
Le Chasseur, 250, 251.
Le Charmel, 256, 257.
Le Ferte-sur-Aubie, 62.
Le Nouvion, 372.
Lens, 322.
Le Quesnoy, 363.
Les Bouleaux, 215, 216.
Le Sourd, 214, 215, 216.
Liping, 31.
Lodz, 30, 126, 311, 313.
Loos, 261, 262, 264, 321, 323.
Lucy le Bocage, 12.
Luzy, 199, 200, 349, 350, 351.

Maast-et-Violaine, 366.
Madelene Farm, 352, 353.
Magdhaba, 121.
Maison Blanche Inn, 348, 349, 350.
Maissin, 184, 185, 337, 338.
Malavillers, 202, 204.
Malzew, 31.
Manoncourt, 343, 344, 345.
Marchavanne, 27, 28, 29, 330, 331, 332.
Marcelly, 194, 197, 198.
Marod, 33, 39.
Marne, Battle of the, 1, 62, 195, 196,
359.
Marne River, 4, 5, 7, 55, 56, 57, 58,
74, 96, 97, 98, 152, 196, 197, 198,
199, 228, 229, 232, 256.
Martie Vaart, 375, 376.
Martincourt, 199, 200.
Mehlkehmen, 64, 65.
Mercy-le-Haut, 202, 204.
Meuse-Argonne, 16, 141, 149, 181, 182,
233, 274, 279, 307, 309, 353.
Meuse River, 41, 50, 51, 66, 67, 77,
123, 199, 200, 201, 279, 280, 348,
350, 352.
Mezieres, 282, 283, 285.
Mezy, 4, 5, 8, 56, 74, 223, 229, 231,
232, 233.
Miasga Stream, 127.
Mines Reichland, 202, 203.
Missy, 302, 303.
Missy-aux-Bois Ravine, 302, 303, 340,
341.
Molleville Ridge, 77, 78, 79, 80.
Mons, 61.
Montagne de Paris, 170, 171, 172.
Montblainville, 308.

GEOGRAPHICAL INDEX

- Monthyon, 142, 143, 144, 194, 195, 196.
 Montmirail, 62, 137, 138, 139.
 Montrebeau Wood, 234.
 Montrichel Woods, 128, 129.
 Mont St. Pere, 5, 7, 9, 56, 74, 228, 229.
 Mont sans Pain, 170, 171, 172.
 Moranville, 128, 129.
 Mortfontaine, 250.
 Moulainville, 129, 130.
 Moulin de Charlevaux, 114, 115.
 Moulins, 5, 56, 74.
 Mt. St. Jean, 343, 344, 345.
 Mt. Toulain, 343, 344, 345.
 Mouzon, 66, 67.

 Nantillois, 18, 19, 20, 21, 22.
 Navarin Ferme, 292, 293.
 Naza Ridge, 150.
 Nek, the, 334.
 Nesles, 89, 269, 271.
 Neufchateau, 93, 94, 95, 119, 120.
 Nomeny, 343, 344, 345.
 Noordschote, 375, 376, 377, 378.
 Noroy, 53.
 Nouart, 40, 41, 42, 66.

 Oise River, 146, 147, 282, 283, 284, 285.
 Oostvleteren, 375.
 Ottange, 203.
 Ourcq River, 53, 195, 208, 209, 210, 211, 212, 267.
 Oycke, 243, 244.

 Paris, 140, 142, 144, 194, 196.
 Paroy, 74.
 Parvillers, 363, 364.
 Penchard, 142, 143.
 Petit Foucomme, 372, 373.
 Petit Morin River, 3, 137, 138.
 Petit Verly, 330, 331.
 Plessis l'Evique, 142, 143, 195.
 Pouilly, 49, 50, 51, 52, 349, 350.
 Premont, 101, 102.

 Rafa, 121.
 Rassy, 226.
 Rau de Mayache, 234.
 Reninghe, 375.
 Romagne, 17, 19, 20, 245, 246, 258, 300, 301, 320.
 Romery, 147, 148.
 Rossignol, 81, 119, 120, 201.
 Rouvroy, 363, 364.
 Ru Chailly Farm, 4, 5, 6, 8, 56.
 Rue des Fontaines, 214, 215, 216.
 Rue Marin, 214, 215, 216.
 Rzgow, 311, 312.

 St. Juvin, 37, 38, 39.
 St. Mihiel, 315, 316.
 St. Remy Farm, 50.
 St. Souplets, 194, 195, 196.
 St. Thibaut, 35, 36, 37, 219, 220, 221, 237, 238, 239, 240, 243.
 St. Vincent, 14.
 Sambre Canal, 29, 75, 76.
 Sambre River, 99, 100.
 Sarrois, 372.
 Saulcourt, 223, 224, 225.
 Saviers River, 53, 54, 55.
 Scheldt River, 243, 244.
 Seboncourt, 324, 325.
 Sedan, 66, 68, 69.
 Seille River, 343, 344.
 Semoy, 81, 119, 120.
 Senecy Farm, 282, 283, 284, 285.
 Sergy, 88, 209, 210, 267, 268, 271, 297.
 Serrouville, 202, 203, 204.
 Sery, 282, 283.
 Sezanne, 62, 63.
 Signal de Marthil, 176, 177.
 Soissons, 315, 366, 367.
 Somme, 61, 355.
 Spitaals Bosschen, 243.
 Stalluponen, 63, 64.
 Stenay, 66, 349, 350, 352.
 Stonne, 66, 67, 68.
 Stosswehr, 69, 70.
 Sucrerie, 282, 283, 284.

 Tamines, 99.
 Tancourt, 288.
 Tannenber, 123.
 Taverne Brook, 208, 209.
 Thiepval, 355.
 Tollmingkehmen, 63, 64.
 Torcy, 12.
 Triangle Farm, 294, 295.
 Trilport, 197.
 Troesnes, 53, 54.

 Varedes, 197, 198, 199.
 Vaux, 296, 304.
 Vauxreux, 288.
 Vauxrot Glass Factory, 367.
 Venerolles, 75, 76.
 Verdun, 84, 104, 128.
 Verennes, 308.
 Vesle River, 34, 35, 36, 75, 173, 175, 201, 219, 221, 238, 239, 241, 242, 243.
 Villeblain, 366, 367.
 Villenoyenne, 138.
 Villers Cotterets, 61.
 Virton, 118, 119, 120.
 Vrely, 363.

 Wame Creek, 49, 50, 51.
 Warvilliers, 363.
 Wiege, 147, 148.
 Wisztyniec, 64, 65.
 Woivre, 128.
 Wortegem, 243, 244.

 Xivry-Circourt, 202.

 Yperlee Canal, 376.
 Yser Canal, 375, 376.
 Yser River, 375, 376, 378.